IN THE UNITED STATES DISTRICT COURT

IN AND FOR THE DISTRICT OF DELAWARE

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INTERNATIONAL BUSINESS MACHINES CORPORATION,	:	CIVIL ACTION
Plaintiff,	:	
v	:	
GROUPON, INC.,	:	
	:	NO. 16-122-LPS
Defendant.		

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Wilmington, Delaware
Monday, July 23, 2018
Jury Trial - Volume F

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BEFORE: HONORABLE LEONARD P. STARK, Chief Judge, and a jury

APPEARANCES:

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P R O C E E D I N G S

(REPORTER'S NOTE: The following jury trial was held in open court, beginning at 8:38 a.m.)

THE COURT: Good morning.

(The attorneys respond, "Good morning, Your Honor.")

THE COURT: So is there anything from IBM this morning?

MR. OUSSAYEF: Yes, Your Honor.

THE COURT: Okay. Good morning.

MR. OUSSAYEF: Good morning, Your Honor. Karim Oussayef for IBM.

The first issue this morning concerns the argument we had last Friday about a template file. And you might remember there was a visualization of that and how defendants were permitted to use that visualization based on a representation that "this is a file produced, a template file, a template file that is just opened with a web browser. I didn't -- there is no manipulation done whatsoever to the actual file."

And on the right here, on page 1006 of the trial transcript: "He could have expected it. He would have just opened up this file with a browser. For example, he could have used Explorer."

And then, the representation that there was absolutely no manipulation to the file.

So, and down here, that it was just like any other HTML file.

Well, that didn't sound right us to. So this weekend, we went to inspect the source code, and it turns out if you open it up in a browser, it does not appear how it looked in the slides that Groupon presented. You have to change the file extensions. You have to change the name file. And when you open it up in a browser and that is when you get the appearance.

This is important because we did not have the opportunity to change files under the protective order. And we do not have the opportunity to know that the files would be manipulated in that way.

We brought this to the attention of Groupon and Groupon withdrew the slides that these -- the images that they were going to rely on. And the only thing I would ask, Your Honor, is that we not by charged with the time that we spent arguing against a representation that turned out not to be true. And I think we're on track, Your Honor, to finish the trial in mid this week, probably Wednesday or maybe probably Wednesday. So I don't think that will affect the trial schedule. But frankly, Your Honor, it's a little bit unfair that we spent an hour and-a-half arguing against this template issue when, in fact, the representations that you just had to open it up or did not turn out to be true.

THE COURT: Okay.

Good morning.

MS. SHAMILOV: Good morning, Your Honor. I do not believe my misrepresentations were not true.

THE COURT: Wait. Did you say your misrepresentations?

MS. SHAMILOV: Oh, sorry. That what I said was not true. There was, the contents of the files were not changed.

THE COURT: Hold on.

MS. SHAMILOV: Okay.

THE COURT: You believe what you what you said was true.

MS. SHAMILOV: Yes.

THE COURT: Okay.

MS. SHAMILOV: On Friday, there were a whole bunch of objections to Mr. Davis's demonstratives not just relating to that issue that Your Honor overruled on every single claim.

Then on Friday, you also gave me a really good idea how to tweak the demonstratives, so the slides we're objecting to on Friday were actually updated so they're not objecting to anything in Mr. Davis's demonstratives that were disclosed for today.

The representation that they couldn't change or save files, they actually created a whole bunch of files on the source code laptop by comparing various files. That the

fact that you could open the template files with the web browser was disclosed in our expert report. They knew that those were web browser files. They were disclosed in the expert report and explained that they were web browser files. The expert knows and is presumed to know how to open web browser files, you know, HTML files in the web browser.

I'm just not sure I understand the issue. I certainly don't agree that we should be charged for time arguing a whole bunch of issues that they have raised with Mr. Davis's demonstratives.

THE COURT: Did it turn out you have to change the extensions on the files?

MS. SHAMILOV: You had to sort of, you had to change the HTML extension to be able to open with the browser, but that was precisely disclosed in our expert report, and they knew that.

THE COURT: Well, they night have known that, but did I know that? I mean my understanding and my recollection is you were telling me and persuaded me all you do is open this.

MS. SHAMILOV: Yes.

THE COURT: But it sounds like that is not true.

MS. SHAMILOV: Well, I didn't manipulate the files. I didn't change the account. I don't have access or nobody on our team has access to any tools that -- on --

that IBM's counsel or their expert had.

THE COURT: How about on your end? Do you have to change the extensions in order to get that image that you wanted to show?

MS. SHAMILOV: You mean on the source code laptop? When you look at the source code laptop, so you would look, there is a whole bunch of .HTML files and .CPP files. Both of those sets of files our expert explained are HTML files and there is a make file. There is a file in the source code laptop that goes through and says everything that CPP is open in the browser with .HTML.

So I didn't change any file. There was no compilation. I didn't do anything to manipulate the file. It was also used as a demonstrative. Counsel raised an issue that they haven't seen, you know, that kind of representation on the slide.

IBM has used demonstratives in this case that we have never seen in discovery at all including, for example, the game that Mr. Filepp talked about. That was never disclosed to us. They used it as a demonstrative. It was never raised as an issue. We weren't planning to move any of these renderings into evidence. That is sort of what, the nature of the argument on Friday.

I didn't -- there was no program ran, no nothing to manipulate the contents of the file to make it show

something that is not in the file. That when I was describing it on Friday, that is what we did is just open the file with the browser. It is consistent with how you would open a .CPP file in a browser described in the report and in the source code file itself.

And these exhibits, the exhibits that the demonstratives that were at issue on Friday are not in the set anymore because we tweaked them. There was something you said on Friday that gave me a different idea, and that is what we did. It had nothing to do with the issues on Friday.

THE COURT: Okay. Is there anything else?

MS. SHAMILOV: Not on this issue. Thank you.

THE COURT: Sure.

MR. OUSSAYEF: Your Honor, the representations to the Court was absolutely no manipulation. They changed the file extensions. We were not permitted to do that under the protective order, and we should not be charged with the time arguing against a representation that turned out not to be true.

THE COURT: It wasn't the only thing that we talked about for that hour and-a-half, was it?

MR. OUSSAYEF: No, Your Honor. You know, my memory is a little bit foggy as to where the issues were. I think there was a substantial back and forth. And it was me

at the podium and then I think it was Ms. Shamilov and Mr. Hadden back and forth. You know, it was kind of me against two for a long period of time.

THE COURT: Okay. Did you have more to say on this?

MS. SHAMILOV: Just one quick thing. There is nothing in the protective order, Your Honor, that prevents sort of redoing files or opening them with anything. We haven't changed them and they did create new files and compared files and ran sort of comparison tools on the laptop computer. So that was definitely within the protective order. There was nothing done on our side in violation of the protective order.

THE COURT: Right. But the issue that was raised this morning is whether you were entirely truthful with me. And I haven't heard an explanation. That I hear you say you were --

MS. SHAMILOV: Right.

THE COURT: -- but I don't understand how I could reach that conclusion. I'm not saying you intended to mislead me, but I'm afraid I was mislead.

MS. SHAMILOV: I'm sorry, Your Honor, for that. I didn't intend to mislead you at all. Because there was a whole bunch of sort of -- there were three sets of demonstratives. Two of them were .HTML files. So you just

opened, literally the two files you would open in a browser and you would see the exactly just like that. And those were the pages that they have objected to. There was no extension changed from those.

One of those was a .TTP file to open it in HTML. Again, none of the contents of the files were changed. You just did it, you know, the extension was .HTML to open it with a web browser, which the other two files were. So there was only one slide that was referred to the file where .HTML had to be put in there, but the other two were exactly that .HTML file. It did not change. There was no extension changes. They were not HTML, you would open it, you would see it just exactly like that.

And, again, I apologize. When I was talking about no manipulation of the files, I meant the contents were not done because counsel reached out. And when they got up and talked about compiling and doing something to these files, which we have no ability to do whatsoever, we have no tools that were not available to IBM to do it, literally just the contents of the files viewed in a web browser like Notepad type of thing. So when I was discussing no manipulation, I was adamant about no running any software. And I definitely did go intend to mislead the Court and I apologize sincerely if that took place.

THE COURT: Anything further on this?

MR. OUSSAYEF: Nothing further on this issue, Your Honor.

THE COURT: Give me a moment.

(The Court and Law Clerk confer.)

THE COURT: All right. So I am going to shift some of the time from last Friday's discussion. Specifically, a half hour. So the half hour that was charged to IBM will now be charged to Groupon, plus the time this morning so far that we have used from both sides to discuss this issue and for me to say hopefully as little as possible about why I'm doing this.

I'm doing this because I am persuaded that what I was told was not entirely accurate. I don't say that anyone intended to mislead me, but I was, as I think I indicated, struggling a little bit to understand the technological dispute, and I did rely heavily on my understanding which I think turns out to be incorrect that absolutely nothing had to be done in order to see the display the way defendant at that time at least proposed to show it. That evidently was not entirely true. And I think it's reasonable to think that had that statement and statements like it not been made, we, at a minimum, could have gotten to the bottom of the dispute more quickly.

So that's my ruling on that issue, and we'll put that one behind us.

Any other issues from IBM this morning?

MR. OUSSAYEF: Yes, Your Honor.

So the next issue, Your Honor, is that per the protective order, slides are due to be disclosed to the other side by 7:00 p.m. We got a bunch of slides last night at I think it was 8:30 or 9:00 p.m., which is fine. We understand that sometimes there are issues that happen.

But this morning, 12 hours after the deadline to disclose slides, we got a whole new bunch of slides, some of them that were never disclosed to us previously. And, you know, the total of slides is about 250 slides, and we do not have any indication of exactly what changed. And all I would ask, Your Honor, is to enforce the pretrial order which says you should disclose slides at 7:00 p.m. So all the new slides that are disclosed this morning at 7:30 a.m. that we really don't have a chance to review, we would ask that Groupon not be permitted to rely upon those slides.

THE COURT: Does this stretch across multiple witnesses or just one witness?

MR. OUSSAYEF: It's primarily the Weissman expert slides.

THE COURT: All right.

MS. SHAMILOV: Good morning, Your Honor. We did provide the slides last night late. We were having -- it was a weekend, there was a server update back home, we were

having technical issues, we informed the counsel, we apologized. We actually ran, I don't know if it's with a hard disk. The protective order allows updates to the demonstratives and said as soon as reasonably -- as soon as you reasonably know that the demonstratives would be changed, provide it to the other side. We did. We just made cosmetic changes. We identified the slides --

THE COURT: I'm sorry, did you tell them which ones?

MS. SHAMILOV: We told them there was an email that went back this morning identifying which slides were changed and other things were cosmetic changes.

THE COURT: Did you add new ones this morning?

MS. SHAMILOV: There were no new slides added, there was just edits to the slides that were provided. When IBM called its expert witness, they did disclose 300 slides to us, updated slides at 4 o'clock in the morning, which in my view there is no difference between 4 o'clock and 7 o'clock, many of my team members are sleeping. That was done with their expert report when they served slides and they gave us 300 updated slide deck at 4 o'clock in the morning. The protective order specifically allows changes to the demonstratives and disclosure of those. We identified the slides that were changed. I'm not sure the specific slides that counsel is talking about.

THE COURT: All right. Well, I guess we're going to have to spend time on this. Mr. Oussayef, give me an example of where you think they disclosed something new at 7:00 this morning.

MR. OUSSAYEF: Yes, Your Honor. We are still going through the slides right now, but it is not true that there are no new slides. There are new slides.

THE COURT: Can you show me one, at least?

MR. OUSSAYEF: Here is a new slide. This has a whole bunch of exhibits that were not disclosed to us last night. For example, DX-58, DX-1678, DX-526, DX-643, et cetera.

THE COURT: Let's be precise here. You're showing me DDX-501. It's the materials Dr. Weissman considered and you're saying, I take it, that they gave you an earlier version of this slide that said he considered other things, but not all of these?

MR. OUSSAYEF: This entire slide is new. And furthermore, we were supposed to disclose both exhibits and slides. And there were exhibits that were not disclosed to us last night that are now on this slides. And at 7:30 this morning, they disclosed new exhibits with new prior art.

THE COURT: That's not something you have mentioned yet to me. Maybe that's a separate issue; right? Right now we're talking about demonstratives.

MR. OUSSAYEF: Yes, Your Honor.

THE COURT: So your representation is if we look at the 8:30 p.m. slide deck, no slide at all about what he considered?

MR. OUSSAYEF: Correct.

THE COURT: All right.

MR. OUSSAYEF: Here is another.

THE COURT: Let's start with one.

Ms. Shamilov, is this true?

MS. SHAMILOV: That is true, Your Honor. I understand there was a meet and confer where the counsel said some of the slides do not identify exhibit numbers and so we created this slide to put the exhibit numbers to be clear which exhibits that we're talking about.

THE COURT: And that might be a great practice, but you just told me a minute ago there were no new slides.

MS. SHAMILOV: That is one thing when counsel told me there were some changes to your slides, specifically in response to the meet and confer process that took place, and you know, the things considered -- I mean, I can scrap the slide, the things considered was they knew about it, it's just a demonstrative and the exhibits were disclosed, we just put it on the slide because counsel said you don't have exhibit numbers on the slide, so we did this in response to the meet and confer.

THE COURT: That might all be great and if they wanted to accept that accommodation, that's fine, but they're here to tell me that you included new slides as late as two hours ago and a minute ago you told me you didn't, and now, of course you're acknowledging you did. Why shouldn't I just say no new slides, you got the slides you had 8:30 last night?

MS. SHAMILOV: Well, first of all, because I think one, that would be prejudicial because they did -- they changed their slides and gave us new slides.

THE COURT: Maybe you should have objected. You didn't object; right?

MS. SHAMILOV: I didn't object because I didn't think because the protective order the allows modification of the slides and you can disclose them once we modified. That's what we did. I think if a party does one thing and it's fine, I think it's unreasonable to then get up and we did this and now you're doing something else.

THE COURT: We can't turn back time. I don't know if they created new slides at 7:00 a.m. No one told me they did. It's clear that you, your side did. So I guess the question again is, why not hold you to the slides that you disclosed at 8:30 last night?

MS. SHAMILOV: Because I think the protective order allows modifications and disclosure of updated slides,

that's what the parties agreed to.

THE COURT: An alternative is we could spend time going slide by slide for what you're calling a modification, and if in fact I find that they're new, I'm going to strike them. If you persuade me they're modifications, maybe we'll keep them, but I'm not sure it's fair to charge IBM all the time it would take to do that.

MS. SHAMILOV: That's fine. I do not know at this time which slides IBM believes are new. We are not going to call Dr. Weissman until this afternoon. Maybe it's best for IBM to say what's new and we can narrow the dispute that way.

THE COURT: Mr. Oussayef, is that a practically available or reasonable approach?

MR. OUSSAYEF: Your Honor, we're trying to prepare for the rest of what will proceed today. We think the most efficient approach would be that they're stuck with the slides that they disclosed last night. These slides are entirely new.

THE COURT: What about the argument that that's not fair because you were treated differently when it was your case?

MR. OUSSAYEF: There is no example of us adding a new slide at any time in this case after the disclosure deadline. We did modify slides in response to their

objections, and in those situations when they said we don't want you to have the internet show us a little, this type of globe, we want to look at a different globe, as an accommodation we made changes to slides directly responsive. But we never asked for a new slide with a bunch of exhibits on it.

THE COURT: All right. If we go back to their 8:30 slides, do I have objections that I have to deal with with respect to those?

MR. OUSSAYEF: Yes, Your Honor, but that narrows things down because now we can --

THE COURT: Are you prepared to argue those now?

MR. OUSSAYEF: Yes, Your Honor.

THE COURT: I'm striking the slide deck of 7:00 a.m. this morning and the defendants can use the slides they served last night at 8:30 p.m. consistent with the order that's in place here subject to any objections. So if we have objections, let's go to those now.

MR. OUSSAYEF: Yes, Your Honor. One point of clarification, too, I ask that the new exhibits that were disclosed this morning at 7:30 should also be stricken.

THE COURT: Are there new exhibits that you propose to use with Dr. Weissman that were not disclosed?

MS. SHAMILOV: I do not believe there were new exhibits that were disclosed in the email of exhibits that

we will be walking through. I do not know at this time what exhibits IBM believes are new, I can double-check. And the exhibits that Dr. Weissman is going to use with his testimony were acknowledged and are in the slide from 8:30.

THE COURT: You'll have to meet and confer and see if you can identify any that are new this morning.

MR. OUSSAYEF: I have the list right here of new exhibits.

THE COURT: Go ahead and read that list into the record.

MR. OUSSAYEF: DX-58. DX-1678. DX-526. DX-643. DX-648. And DX-649. That's all we were able to identify since 7:30 this morning, but those are all new exhibits.

THE COURT: So to be clear, if the defendant intends to show those exhibits to Dr. Weissman and move them into evidence through him, then you have to meet and confer and if there is an objection, you'll have to bring it up again before we get to Dr. Weissman's testimony.

MR. OUSSAYEF: Thank you, Your Honor.

THE COURT: Other issues I guess with the demonstratives for Dr. Weissman that you got last night?

MR. OUSSAYEF: Yes, Your Honor.

So last night we got a slide deck and we have claim construction arguments that are being made in the

slide deck that we think are inappropriate.

So here we have an excerpt -- so the slide numbers have all changed since disclosure last night. My understanding is they have put together, but just for clarify this is on the slide deck identified as DDX-500 at slide 56.

THE COURT: This is about what you have received about 8:30 p.m. last night?

MR. OUSSAYEF: That's correct. This is an excerpt from the file history, and here this is, you know, reiterating claim construction arguments that the parties made. And as you'll see here, Your Honor, there is an argument about whether the screen and advertisements are presented separately, applications and advertising are separate entities. That's the second quote here. So the argument here is I'm going to walk through the prosecution history and I'll tell you how to understand the claims and advertising has to be separate from applications. That's an argument that was made during claim construction that Groupon lost.

And furthermore, it creates undue prejudice if we're having experts act as pseudo judges telling the jury here is how the claim should be interpreted. We think all discussions of claim construction and how the claims should be construed should be reserved for Your Honor and not the

province of experts.

THE COURT: Well, do you have more, Mr. Oussayef?

MR. OUSSAYEF: No, I do not.

THE COURT: That's the only issue?

MR. OUSSAYEF: No, I have other issues as well. I can walk through some more if you like.

THE COURT: How many do you think you have?

MR. OUSSAYEF: So, there are at least two other issues.

THE COURT: All right. Let's go to the others and then, of course, we'll let Groupon respond.

MR. OUSSAYEF: Okay. The next issue is regarding slide 67. So in this slide there is an argument about non-infringement regarding claim 8 and the argument is about storing a predetermined amount of the advertising data in a store established at the speculative reception systems. That's a claim element that their expert did not even address, never mind the specific argument that is discussed here, which appears to relate to scrolling testimony.

Your Honor might remember that there was testimony from a witness about how you could scroll infinitely long through the mobile application. That's something that was not addressed in their expert report. This entire element was not addressed by their expert in

their expert report. So this, too, should be precluded.

Another issue, Your Honor, is that for -- so those are relating to the Filepp patents, the '849 and the '967.

The final issue here is on slide 111 of their slides concerning the '601 patent. In here we have their expert, Dr. Weissman, and he is walking through various claim elements using a file that was not something that he walked through the claim elements for. So to be clear, this file is what we had a kind of dispute about on Friday. Davis we understand will testify about this file. Their expert did not use that file to walk through the claims. He did cite to this file once in the background section of his report, but he used a different file called user-review.cpp to say hey, this file meets all of the claim elements. Now he's switching gears and he's relying on this file.

There is no citation here as to exactly what file this is, but fair to say this is not a file that he relied on to walk through the claim elements. So there was never a comparison, there was never a comparison between this file and the recursively embedding step or the identifying step or any other step in the claim language, so it's a change in theories and our expert doesn't have an opportunity to develop theories or respond because this is an entirely new theory that is addressed here.

THE COURT: Okay. Thank you. We'll hear from Groupon.

MR. HADDEN: Good morning, Your Honor. Let me start with the prosecution history. This is something that was addressed in Dr. Weissman's report. And there is nothing here that is contrary to the Court's claim construction. One of the arguments between the experts in this case is whether the same image can be part of an application and also advertising. That's a factual dispute. And there was a claim construction issue that went to that.

These statements that IBM made to the patent office are relevant because it pointed out that advertising is separate and has to travel separately through the reception system in the application which goes to the factual dispute as to whether the same image with be both an advertisement and an application.

Applicant went on to say that, in fact, the key to the entire invention was the separate treatment and the dichotomy between applications and advertising. That goes to the factual issue as to whether the same image can be an advertisement and an application in this case. And that is not a claim construction issue, that's a factual issue. We're not arguing about claim construction.

The top quote does not say anything about that the areas of the screen has to be separate, which was the

claim construction issue that they were referring to. All it says is that advertising and applications are separately displayed. That again goes to the question of whether or not the exact same content can be both an advertisement and application and which is a contested factual issue in this case. I don't think there is anything improper about this slide.

THE COURT: When asked, Dr. Weissman will say he was aware of the Court's claim construction and applied it?

MR. HADDEN: Yes. Absolutely, Your Honor.

The second issue raises the problem with what IBM is asking for, the scrolling slides and the slide that they said is beyond the scope. We removed the slides. That was part of the update that we provided in the middle of the night and this morning in response to their meet and confer. They're objecting to slides that we have already taken out and not letting us put in replacement slides to address their objections. It's unfair and it's improper. We pulled the slide that they objected to as we're supposed to do in the meet and confer process to eliminate the disputes that we can and now they're saying you can't put in the replacement that doesn't have the objectionable content.

On the final point, the template slide, and this is from Dr. Weissman's report under this ordering, he goes through the ordering process on the Amazon website in 1995,

cites to and explains that same template.

Now, when he -- the file that they're referring to is highlighted right here in his discussion in the report. Now, he used a different web page as an example to show that the links were embedded with the state information, but he also explained that exactly the same program works on all these template files and it works the same way in all of them.

This is fully disclosed. There is no difference. We can swap out that slide for a different web page, but they all work the same. And it was fully disclosed in his report.

THE COURT: Okay.

MR. HADDEN: Thank you.

THE COURT: On issues one and three, I'm overruling the objection. With respect to the claim construction, the expert is going to say that he applied the Court's claim construction. And, of course, I'll instruct the jury to follow my claim construction and not to follow any contrary claim construction that they might hear from the experts. And I don't think under 403 that the balance would favor preventing the defendant's expert from applying the construction consistent with the way he has done so evidently throughout this case, and including in his expert report.

And on objection three, which related to something around slide 111, an expert doesn't have to use the exact same words or even the exact same examples that they previously disclosed. The fact is he did disclose or reference the file he wants to use. It seems to me substantively consistent and at minimum a reasonable elaboration on the opinion he disclosed to use this file for the purpose he plans to use it for.

Now, with respect to slide 67, Mr. Oussayef, I do want you to come back. If it is the case that they timely disclosed slides at 8:30 at night, you have already said you're willing to treat that as timely, and you raised an objection and their response to the objection is to create a new slide, then it seems to me I should allow them to do that. They're trying to accommodate your objection. Do you disagree with that?

MR. OUSSAYEF: So, no, Your Honor. That is not what I -- I don't disagree with that. I just had no chances to review and saw they withdrew that slide. So given that they withdrew that and they're not going to argue that claim element for claim 8, which wasn't disclosed in their expert report, I have no objection to them not presenting that slide.

THE COURT: Sure. But it seems to me I think we're also being told there is some new slide. I assume you

can identify it for us real quickly.

MR. HADDEN: Sure. I can, Your Honor.

There are other examples of this. This is why the ruling that we're stuck with at 8:30 kind of doesn't work, because they have other objections where we modified the slides to accommodate their objections.

So I understand the issue with brand new slides. It had nothing to do with what was disclosed at 8:30. If I could ask if we have a period to meet and confer to figure out what the issues are. Because, for example, this is another one where we had slides that talk about you will hear more about it today. You heard some about it on Friday, the different flows through the single-sign-on process, and went through all four flows that Mr. Breen is going to talk about.

They objected and said one of those was not described in Dr. Weissman's report. So we said, okay, you're right. We took that flow out. To do that, we had to change our slides to show only the three that Dr. Weissman is going to talk about.

There are issues like that where this notion that we're stuck with the slides that they objected to but we can't put in the replacement to fix their objections just doesn't seem workable.

THE COURT: Here is -- I mean there is a number

of problems here, but one is it takes a lot of time and it's going to come out of one or both of your sides for me to draw a line between a new slide and a modification -- a modification in good faith based on a meet and confer, which it sounds like this one is. You went from four images to just three images after realizing the fourth image wasn't properly disclosed. That seems like something that reasonably happens and you should be allowed to do.

Creating a whole new slide that was not shared in a timely manner and only given two hours before trial begins in the morning seems unfair and unduly prejudicial. But if you all can't figure that out and work it out yourself, you are going to have to continue as we are now using your time, which I'm willing to do. The jury is probably happy to sit there not in the jury box, but I don't know if that is really the best use of your time.

So, Mr. Oussayef, what do you suggest?

MR. OUSSAYEF: Your Honor, I think that is a clear bright line between new slides versus modifying existing slides in good faith in response to our objections. And I'm confident the parties can deal with that bright line that Your Honor has identified.

THE COURT: Even with respect to Dr. Weissman who is evidently coming on the stand today?

MR. OUSSAYEF: I mean I think that we'll have to

work hard. And we might have -- hopefully, we don't have issues but we might have issues at lunch. But, you know, if there is no new -- I mean as long as there are no new slides and everything they are talking about is a good faith reaction to what we said and it's just modifying an existing slide, then we can work it out.

THE COURT: Okay. I trust you are all going to work that out. You will have to let me know if you don't, but I hope not to hear from you, but if you need my help, you will let me know.

MR. HADDEN: Thank you, Your Honor.

THE COURT: Any other issues, IBM?

MR. OUSSAYEF: Yes, there is an objection to some deposition designations.

THE COURT: Is that the letter from yesterday?

MR. OUSSAYEF: Yes, that's correct.

THE COURT: You don't need to spend time on that.

MR. OUSSAYEF: Thank you, Your Honor.

THE COURT: Any issues that Groupon wanted to raise this morning?

MS. SHAMILOV: Just one question, Your Honor.

THE COURT: Okay.

MS. SHAMILOV: On the letter that was filed yesterday where we were intending to play the clip today, I

wasn't sure if Your Honor would resolve it.

THE COURT: Yes. This is the same letter Mr. Oussayef just mentioned?

MS. SHAMILOV: Yes.

THE COURT: Okay. I'll tell you now.

So how we're all talking about the same letter. It's with respect to one of the inventors, Iyengar.

MS. SHAMILOV: Correct.

THE COURT: Each side had one objection to the other side's objections. We're sustaining both sets of objections.

With respect to IBM's objections to around pages 40 to 42, I agree with IBM that the 403 balance strongly suggests that I should exclude this testimony. It seemed to me that the witness didn't understand the question in the way that I think had as much to do with the question as the witness may not being responsive on anything Groupon would think is relevant. Any minimal probative value is strongly outweighed by the risk of unfair prejudice. So I'm excluding that and therefore sustaining IBM's objection.

And then I'm sustaining Groupon's objection to around pages 31 to 32. It does seem to me improper use of the deposition from a case that didn't even involve Groupon and where Groupon was not present. So we'll split that last minute with each side.

Is there anything else before we bring the jury in today?

MR. OUSSAYEF: No, Your Honor.

THE COURT: No.

No?

MR. HADDEN: No Your Honor.

THE COURT: All right. We'll take a short break, and we'll come back with the jury.

(Brief recess taken.)

*** * ***

(Proceedings reconvened after recess.)

THE COURT: The jury is ready. We'll bring them in.

MR. DAY: Your Honor, I have some witness pictures to add to the binder.

THE COURT: Okay. You can pass those up.

(Documents passed forward.)

(Jury returned.)

THE COURT: Welcome back, ladies and gentlemen. Nice to see you all. I hope you enjoyed the weekend. We are ready to proceed in just a moment.

We have some more photos for you of some witnesses to pass out.

(Documents passed out.)

THE COURT: Welcome back.

MR. HAACK: Thank you, Your Honor.

THE COURT: You may recall the witness.

MR. HAACK: Your Honor, Groupon calls Mr. Jim Breen.

THE COURT: Okay. Good morning, Mr. Breen. Welcome back. I hope you had a nice weekend. I remind you that you remain under oath.

THE WITNESS: Of course.

... JAMES P. BREEN, having been previously sworn, was examined and testified further as follows ...

THE COURT: Mr. Haack, you may proceed.

MR. HAACK: Thank you, Your Honor.

DIRECT EXAMINATION (Continued)

BY MR. HAACK:

Q. **Mr. Breen, I'd like to start today by just kind of refreshing the jury since we had a weekend in between your testimony. Can you just give us a quick recap of your job responsibilities at Groupon?**

A. **Yes. I'm currently Senior Engineering Manager with the financial engineer development team. I was formerly manager of the users team for Groupon.**

Q. **Thank you. And last week we spoke about Facebook sign-up with Groupon. Do you remember that?**

A. **Yes.**

Q. **And I'd like to hit a couple of high points with the**

jury about that. How, when a user is at the Groupon login page, how does the user sign up with Facebook -- sorry, sign up at Groupon with Facebook?

A. **The user clicks on a sign up with the Facebook button which will result in the SDK sending a request to Facebook servers. And there is an interaction with the Facebook servers and the browser where the user is prompted via a couple dialogs, which are pages from Facebook's website, to collect the e-mail address and password on the user's Facebook account, at which point that information is sent to Facebook, and Facebook eventually responds with the access token to the browser.**

MR. HAACK: Your Honor, may I approach the witness?

THE COURT: You may freely approach.

(Documents passed forward.)

BY MR. HAACK:

Q. **Now, Mr. Breen, could you turn to the tab marked DX-388 in your binder?**

A. **Yes.**

MR. HAACK: Your Honor, this is a document that was mistakenly admitted under a wrong number last week, it was 388. We admitted it as DX-38. I would like to show it to the jury real quickly and have it admitted into evidence.

THE COURT: Sure.

BY MR. HAACK:

Q. **Is this a document about the access tokens we were discussing on Friday with Facebook, Mr. Breen?**

A. **Yes, it is. This is documentation from the Facebook developer's website about their access tokens.**

MR. HAACK: Your Honor, we would like to offer it into evidence.

THE COURT: This is 388.

MR. HAACK: 388.

THE COURT: Any objection?

MR. DESMARAIS: No objection.

THE COURT: 388 is admitted.

(DX-388 was admitted into evidence.)

BY MR. HAACK:

Q. **Mr. Breen, can you turn to the tab in your binder marked PX-1090?**

A. **(Witness complies.)**

Q. **Do you see that in front of you, Mr. Breen?**

A. **I do.**

Q. **Do you recognize this document?**

A. **Yes. This is also a document from the Facebook developer's website.**

Q. **And this is documentation that you and other engineers at Groupon used to build Facebook sign up?**

A. **Yes.**

Q. **And this document says: At this point in the flow, the person is authenticated and logged in. Your app is now ready to make API calls on their behalf from the browser.**

Would you explain what that means to the jury very quickly?

A. **It means that once the access token has come back from Facebook, it can be used to make API calls to Facebook.**

Q. **And what is an API call?**

A. **An API call is -- an API is software that runs on Facebook servers, and it allows other systems to interact with data on the Facebook servers.**

Q. **So in this case, it would be -- would Groupon be one of the other servers?**

A. **Yes.**

Q. **Getting information from Facebook?**

A. **That's correct.**

Q. **And do these access tokens have any data in them about a user?**

A. **No, not that is physical to Groupon in any way.**

Q. **Is any data visible to Facebook at all in an access token?**

A. **No.**

Q. **And we also spoke some about Google sign in last week; right?**

A. **Yes.**

Q. **And there are two different login flows for Google by Groupon; correct?**

A. **That's correct.**

Q. **And I believe last week we described one of those flows. Can you remind the jury what that one was?**

A. **It was the one time code flow.**

Q. **And, Mr. Breen, would you turn to Defendant's Exhibit 642.**

A. **(Witness complies.)**

Q. **And do you recognize this document, Mr. Breen?**

A. **I do.**

Q. **And what is this document?**

A. **This is a page of documentation from Google's website for developers describing some of the process for single-sign-on with Google.**

Q. **And is this document that engineers at Groupon used at Google sign in?**

A. **Yes.**

MR. HAACK: Your Honor, we would like to offer Defendant's Exhibit 642 into evidence.

MR. DESMARAIS: No objection.

THE COURT: It's admitted.

MR. HAACK: Thank you.

(Defendants's Exhibit No. 642 was admitted.)

BY MR. HAACK:

Q. **And in the one time codes we discussed on Friday, do those one time codes from Google have any information about a user?**

A. **They do not.**

Q. **And is there any information at all that Groupon can get out of that one-time code?**

A. **No.**

Q. **And what does Groupon do with the one-time code?**

A. **Once the one-time code has passed through the user browser in the Groupon servers, Groupon will make an API call to Google API to exchange the one-time code for a one-time authentication code for an access token.**

Q. **And does the access token have any data about a user in it?**

A. **It does not.**

Q. **And can Groupon read any data in the access token?**

A. **No.**

Q. **What is your finding with the access token flow?**

A. **Groupon is able to make another API call to Google with the access token to retrieve information from Google's account.**

Q. **I would like move on, there is a third flow we didn't get to on Friday; right, Mr. Breen?**

A. **Yes.**

Q. **What is that flow called?**

A. **It's the Google ID token flow.**

Q. **And the ID token, how does that flow start?**

A. **It starts the same way that the on flow starts with the use of a clicking the sign up with Google button, and when it does this, the Google SDK that's been downloaded into the browser will send a request to Google servers and Google responds, that response triggers a pop up dialogue box as part of Google's website where they can enter their email address which sends another request back to Google's servers. And Google sends a response back to the browser.**

This new dialogue box with that response allows you to enter the password with the email address and that is sent out to Google's servers. The response comes back for a certain pop up page that has the user confirmed which is the Google account, their sign in Google accounts they would like associated with Groupon.

Q. **Just to pause it, this is if you had more than one account with Google, this let's you pick which Google account to use?**

A. **If you're signing in with more than one Google account at that point, you're selecting which one to use.**

Q. **What happens after that?**

A. **The submission of that page will send another request back to Google and Google will generate an ID token and send that back to Google's SDK browser.**

Q. **And then what?**

A. **So then the browser will send that ID token to Groupon's servers, and this token is different than the other ones. This token had a signature on it that Groupon can use to verify the account did come from Google and the data in it is valid.**

Q. **What is the data in the ID token?**

A. **Groupon is able to obtain the Google user ID, user name and email address for the token.**

Q. **And when you say obtain it for the token, do you mean directly from within the token?**

A. **Yes.**

Q. **So there is not an additional call back to the Google servers?**

A. **No.**

Q. **And Mr. Breen, could you turn to the tab marked DX-209. Let me know when you're there.**

A. **I'm there.**

Q. **Mr. Breen, do you recognize Exhibit 209?**

A. **Yes.**

Q. **What is 209?**

A. **This is a part of the documentation from Google's website for developers that talks about how to build Google sign in for Android with the use of a back-end server.**

Q. **If you could turn to the fourth and last page of**

Exhibit 209, please. There is a section there on the end that says create an account or session. Do you see that, Mr. Breen?

A. **Yes.**

Q. **And what is this? What is this documentation from Google instructing developers who want to use ID token sign in to do?**

A. **It's instructing them that they can -- using the -- using the data obtained vis-à-vis the token they can see if there is an existing account in their database in which case they can log in as that, otherwise they can create a new account, create a new user record for the information in the token.**

Q. **So this is Groupon -- sorry, this is Google documentation telling users of Google sign in like Groupon that they can make new user accounts with the ID token?**

A. **Yes.**

MR. HAACK: Your Honor, I would like to offer Defendant's Exhibit 209 into evidence.

MR. DESMARAIS: No objection.

THE COURT: It's admitted.

MR. HAACK: Thank you.

(Defendant's Exhibit No. 209 was admitted.)

BY MR. HAACK:

Q. **And Mr. Breen, now, we talked about a couple of**

different login flows from Google, both the ID token and the one-time code. Which flow does the Groupon website use?

A. **The Groupon website uses the ID token flow.**

Q. **And what about what did it used to use?**

A. **It used to use the one time code.**

Q. **And why did Groupon make that switch?**

A. **It made the switch because the one-time code flow required API calls from Groupon servers to Google servers, and those API calls were not performing well. They were very slow or they didn't succeed. We discussed this with Google, Google engineers in hopes they would improve the performance of the API calls on their side, but their recommendation was to change and use the ID token flow instead of the one-time code flow.**

Q. **And as part of the building and maintaining of this feature, does Groupon often talk to people at Google about the feature?**

A. **Periodically.**

Q. **And does Groupon use the one-time code flow anymore?**

A. **No, it does not.**

Q. **And was there ever a period of time where any of the Groupon website or mobile applications used both the one-time code and an ID token?**

A. **Yes, there was.**

Q. **And when was that?**

A. **When the feature was initially implemented in early 2016, the mobile apps used a combination of those.**

Q. **And when you say a combination, what do you mean?**

A. **They started out with an ID token and attempted to follow the ID token flow in order to log the user into an existing account. And if that -- if the ID token cannot be used to login user into an existing account, the clients fell back to the one-time code flow in order to be able to create a new account.**

Q. **So at that point, ID tokens were only used to login users; is that right?**

A. **That's right.**

Q. **And then the one-time code flow is always used to create new user accounts?**

A. **That's correct.**

Q. **Did Groupon have to go through any registration process to be able to use Facebook's sign in or login feature?**

A. **Yes, Groupon had to go through the developers, Google developers' site for developers to basically create a new app or a project in the Google developer console that would then have an app ID and an app seeker that could be used. That setup has to be done before you can integrate with Google login.**

Q. **And that developer console is something that Google**

is running?

A. **I'm sorry?**

Q. **That developer console that you mentioned, that's something at Google?**

A. **Part of Google's website for developers.**

Q. **And did Groupon have to do something similar with Facebook?**

A. **Yes. Groupon developers had to go to the Facebook website for developers and create a new application in there with an app ID and app secret and other configurations necessary to set up in advance.**

Q. **And just to kind of switch back to a kind of little higher level here, we discussed multiple ways that a potential Groupon user can sign up for Groupon. Once that person has an account, does it matter how they created the account?**

A. **No, it does not.**

Q. **Can they sign in using any of those methods once they have the account?**

A. **Yes, they can.**

Q. **And that includes accounts being created by Facebook?**

A. **Yes.**

Q. **And accounts created by Google?**

A. **Yes.**

Q. **And do Groupon users have to use Facebook or Google**

at all to use Groupon?

A. **No, they do not. They can sign up directly with Groupon and then sign in directly with Groupon.**

Q. **And then Mr. Breen, I would like to look at one more document, Defendant's 210. And do you recognize Exhibit 210?**

A. **Yes.**

Q. **What is Exhibit 210?**

A. **210 is a piece of documentation from the Google website for developers describing how to retrieve information for a sign in user.**

Q. **Like the other Google documents we discussed, that is the type of documentation that Groupon engineers used to build the feature we're discussing?**

A. **Yes.**

MR. HAACK: Your Honor, we would like the offer Exhibit 210 into evidence.

MR. DESMARAIS: No objection.

THE COURT: It's admitted.

MR. HAACK: Thank you.

(Defendant's Exhibit No. 210 was admitted.)

MR. HAACK: I pass the witness.

THE COURT: Okay. Cross-examination.

MR. DESMARAIS: Thank you, Your Honor. John Desmarais for IBM. Good morning. Good morning, ladies and

gentlemen.

CROSS-EXAMINATION

BY MR. DESMARAIS:

Q. **And good morning to you, Mr. Breen.**

A. **Good morning.**

Q. **Now, you took us through last week and this morning several animations with communication back and forth between Groupon and Facebook and Google. Do you recall that?**

A. **Yes.**

Q. **And in each instance, after all the back and forth, either Facebook or Google, depending on who you were communicating with simply sent back to Groupon the user email address and possibly their name and some other identifying information about the user; right?**

A. **Yes.**

Q. **And all the back and forth ended up sending this email address and the name of the user, all the back and forth is simply to verify that it was Groupon communicating and to verify the user to sort of prevent fraud or spoofing or something like that, that back and forth is for authorization before they disclose the email and the name?**

A. **The back and forth is the way it's described by Groupon and Google to obtain that information.**

Q. **The point of it is to get authorization before they disclose the name?**

A. **Authorization provided by the user.**

Q. **They're trying prevent spoofing or fraud or disclosing the name and email address to somebody that isn't Groupon or somebody that isn't the user; right?**

A. **That's part of the process.**

Q. **At the end of the day, at the end of the day, Groupon is getting the user's email and their name; right?**

A. **Yes.**

Q. **And if we look at the documents that you reviewed, let's start with 388. 388 is one of the documents you just reviewed for us; right?**

A. **Yes.**

Q. **And this one relates to the Facebook login; right?**

A. **That's correct.**

Q. **And if we turn to page two, it tells us on page two all platforms follow the basic strategy to get a user token. Do you see that? Do you want me to blow it up? Do you see it?**

A. **Sure, if you could make it a little bit bigger, that would be great.**

Q. **It says all platforms follow the basic strategy to get a user token. Do you see that?**

A. **I do see that.**

Q. **And then shows us the strategy; right? It says the client requests access and permissions, do you see that?**

A. **Yes.**
Q. **And then the user authenticates. Do you see that?**
A. **Yes.**
Q. **And then access token is returned to client. Do you see that?**
A. **Yes.**
Q. **The very first thing that happens is the client requests access and permissions in this document; right?**
A. **Yes.**
Q. **And the client in this case is Groupon; right?**
A. **I think the client includes the SDK.**
Q. **But it's Groupon because the user is the person using Groupon; right?**
A. **I believe the client is the web browser which includes the Facebook SDK.**
Q. **They're distinguishing between the user and the client, aren't they?**
A. **The user is the person and the client is the web browser.**
Q. **It's the same for the Google application; right?**
A. **For the Google application, the web browser is the client.**
Q. **And is the very first thing that happens in Google is the web browser reaches out to Google; right?**
A. **The first thing is that the user clicks the sign on**

to Google button.

Q. You talked to us about DDX-302, didn't you?

A. Yes.

Q. Just to be clear, this is at the Groupon.com domain; right?

A. Yes, it is.

Q. And Groupon created what we're looking at there; right?

A. This is the page on Groupon's website.

Q. And Groupon engineers wrote the code that created that, what we're looking at; right?

A. Yes.

Q. And as an initial matter, you have shown it, a red circle on the I'm a new customer, do you see that?

A. Yes.

Q. And at the bottom we see sign up with Facebook or sign up with Google application; right?

A. That's right.

Q. If instead I had the red circle on I have an account, we would still see Facebook and Google at the bottom; right?

A. We would see buttons that say sign in with Facebook and sign in with Google.

Q. So regardless of whether you are on "I have an account" or "I am a new customer," you still have access to clicking the button for Facebook or clicking a button for

Google, right?

A. **Yes.**

Q. **Now, if we go to this, if we look a little more at this page, it talks about you see the Groupon banner at the top; right?**

A. **What banner are you referring to?**

Q. **The Groupon sign in at the top.**

A. **Okay. Yes.**

Q. **We see that it has personalized e-mails to Groupon, right? Right, sir?**

A. **I see the text you have highlighted.**

Q. **Yes. You see Groupon's terms of use and privacy statement; right?**

A. **I see that highlighted.**

Q. **In fact, it takes multiple teams at Groupon, teams of software engineers to work on this page; right?**

A. **There are certain frontend teams that worked on this page.**

Q. **You said at your deposition that there are multiple teams that work on this page, didn't you?**

A. **There are multiple teams that work on the entire Google and Facebook sign in process. This is the front end of that for the website.**

Q. **And the page we're looking at, just to perfectly clear, this page is generated by Groupon code written by**

Groupon engineers; right?
A. Not all of it. Facebook SDK and Google SDK are downloaded into this page.
Q. I'm talking about the Groupon, the sign in for great deals, the personalized Groupon e-mails, the terms of use and the privacy statement. All of that is created by Groupon software engineers and it's rendered for us to see on the Groupon website by Groupon code; right?
A. Those page elements are, yes.
Q. Let me do this here.
And you call that the sign in page; right?
A. I call that the sign up page.
Q. The sign up. You call that the sign up page?
A. Yes.
Q. Now, it's created by Groupon engineers, rendered on the Groupon website using Groupon code; right?
A. The entire, the entire page is not, no.
Q. Other than the button that says Facebook and the button that says Google, it's rendered by Groupon code; right?
A. There are JavaScript libraries downloaded into that page that are not Groupon code.
Q. Fair point. Let me rephrase. Groupon engineers created the software that renders that page, and that process may have taken other snippets of code from other

places and incorporated them into the Groupon code; right?

A. **No, they're not incorporated into the code. They're downloaded separately.**

Q. **They're downloaded separately because Groupon software engineers put in the code that they should be downloaded separately; right?**

A. **It's the browser that downloads the libraries. There is a reference to them.**

Q. **So, sir, you are not denying that it's Groupon engineers and software engineers that create and make the sign up page displayed at the Groupon website, are you?**

A. **Groupon engineers do implement the user experience.**

Q. **I'm sorry. What was that again?**

A. **Groupon engineers do implement the user experience with the sign up page.**

Q. **Thank you. Now, at some point, as we talked about, when a user is trying to sign up or sign in, either way, if they click on the Facebook button or the Google button, we'll see all the communications we talked about, but what happens is, as we have already said, Groupon receives the e-mail address of the user and the name of the user; right?**

A. **That's correct.**

Q. **And the Groupon engineers, the Groupon software engineers have written the code at Groupon on the Groupon servers that receive that e-mail and name and stores it in**

the Groupon database; right?

A. **It will only store it in the database if it's creating an account, but yes.**

Q. **So I've written receiving an identifier. And that's done by the Groupon code.**

A. **Yes.**

Q. **Right, sir?**

A. **At the following instructions provided by Facebook and Google, yes.**

Q. **That's not what I asked you. At Groupon, Groupon software engineers wrote code that receives an e-mail or name or both and they store it in the Groupon database; right?**

A. **Yes, they do that because that is what Facebook and Google tells them to do.**

Q. **But it's Groupon engineers that wrote the code; right?**

A. **Yes.**

Q. **And it's Groupon engineers that decided whether to store it in the database, right?**

A. **No, we didn't decide. We're following instructions provided by Facebook and Google.**

Q. **Now, after you receive the e-mail and the name, Groupon software engineers created software that, as you already said, stores that name in a database and then they**

use it to create a new Groupon account; right? So Groupon wrote software to take that e-mail, take that name and create an account. And that account has unique ID created by Groupon, the e-mail address and the name, a Groupon timestamp, and a Groupon registration; right?

A. **That's correct.**

Q. **And the Groupon engineers wrote the code to do that and to store that new account in a Groupon database; right?**

A. **Yes.**

Q. **So I wrote: Creating a new account based on the identifiers. Do you see that, sir?**

A. **Yes. What identifiers are you referring to?**

Q. **The ones that were received from either Facebook or Google. Right? Right sir?**

A. **I'm not sure what the question is.**

Q. **You asked what are identifiers, and I'm saying the ones received from Facebook or Google. The e-.mail?**

A. **The name is not used as an identifier.**

Q. **So I'll make it single: Creating a new account based on the identifier. Do you see that, sir?**

A. **Yes.**

Q. **And that is what we just talked about is done by code, by computer code written by Groupon engineers for Groupon. And that account is stored in a Groupon database; true?**

A. **Yes.**

Q. **I already checked yes. And I think -- let me show you some exhibits.**

MR. DESMARAIS: May I approach, Your Honor?

THE COURT: Yes.

(Binders passed forward.)

BY MR. DESMARAIS:

Q. **Turn if you would, to Plaintiff's Exhibit 1888. Excuse me. I'm sorry. Let's start with 1174.**

A. **PX-11 --**

Q. **1174.**

A. **Are they in order?**

Q. **Yes. You can see it on the screen if you can't find it in the book, Mr. Breen.**

And this is a portion -- what we're seeing on the screen in Exhibit 1174 is Groupon's source code; right?

A. **Sir, if you can give me a second to take a look.**

Yes, it appears to be Groupon's source code.

MR. DESMARAIS: I offer Plaintiff's Exhibit 1174, Your Honor.

THE COURT: Any objection to 1174?

MS. SHAMILOV: No objection, Your Honor.

THE COURT: No objection?

MS. SHAMILOV: No objection.

THE COURT: It's admitted.

(PX-1174 was admitted into evidence.)

BY MR. DESMARAIS:

Q. **And we can see on line 66 this is the code that creates a Facebook linked account; correct?**

A. **The method name highlighted there is: Create Facebook linked account.**

Q. **And this code is written by Groupon software engineers, and it runs in the Groupon user service on the Groupon servers; right?**

A. **That's correct.**

Q. **And it creates the new account based on the identifier; right?**

A. **This code is creating an account based on parameters patched into this method.**

Q. **And new account is already stored, as you told us, on the Groupon database; correct?**

A. **It succeeds in creating an account that is in the database.**

Q. **And we have code like this for Google, too; right?**

A. **I don't know if it's exactly like this.**

Q. **A portion of it is at Plaintiff's Exhibit 1188, so let me show you that now.**

You recognize this as some Groupon source code; right?

A. **I do.**

Q. **And this one relates to Google; right?**

A. **Yes, it does.**

Q. **But to be clear, it's Groupon's source code written by Groupon engineers and it's executed by Groupon's user service; right?**

A. **This code is, yes. But this code doesn't create an account.**

Q. **But this is a portion of the code relating to Google login, isn't it, sir?**

A. **It is related to Google login.**

Q. **And another portion of the code will create a Google account; right?**

A. **We don't create Google accounts.**

Q. **I'm sorry. It will create a Groupon account that gets stored on the Groupon service; right?**

A. **It will insert a record, yes.**

Q. **And that, the code that does that is written by Groupon software engineers, and the code is executed by Groupon's user services, and the account is stored in the Groupon database; right?**

A. **Yes, by following instructions provided by Google.**

Q. **Now, Groupon doesn't pay Facebook or Google for sending the user's e-mail address; right?**

A. **No.**

Q. **And Groupon doesn't pay Facebook or Google for**

creating accounts for Groupon customers, right?

A. Not to my knowledge.

Q. Now, you know the patent in this case, the '346 patent relates to this sign up operation and creating new accounts; right?

A. To the best of my understanding.

Q. If we just look at the title of the '346 patent.

MR. HAACK: Objection, Your Honor. It's outside the scope of direct. I didn't say anything about any patents.

THE COURT: Mr. Desmarais.

MR. DESMARAIS: His direct was about what was done by Google and what is done by Facebook. All I'm doing is redirecting on what is done by Groupon.

THE COURT: And how does the patent have something to do with that?

MR. DESMARAIS: The title of the patent is Method and System For a Runtime User Account Creation and, I'm going to use that to ask him about the account creation, just to focus.

MR. HAACK: Your Honor, that seems awfully prejudicial. He is take grabbing some words to talk about how Groupon works when the witness hasn't seen anything about this patent.

THE COURT: Which patent is this?

MR. DESMARAIS: This is the '346 patent, Your Honor. I'm just trying to show why the testimony is relevant.

THE COURT: I don't think you need the patent. I'm going to sustain the objection.

BY MR. DESMARAIS:

Q. **You understand, sir, don't you, that the patent in this case that you are here to testify about is about runtime creation of new accounts; right?**

MR. HAACK: Same objection, Your Honor.

THE COURT: Sustained. We're not talking about the patent at this time, Mr. Desmarais.

BY MR. DESMARAIS:

Q. **Well, let me ask it this way. When you design products at Groupon, sir, isn't it true that you and the other folks at Groupon make it a practice not to review other people's patents to make sure they aren't using the technology in those patents; correct?**

MR. HAACK: Also outside the scope.

THE COURT: All right. I'll see counsel at sidebar.

(Sidebar conference held.)

THE COURT: All right. So that was another outside the scope objection?

MR. HAACK: Yes, Your Honor.

THE COURT: What is your view about where the line is here and what is outside the scope?

MR. HAACK: All he has talked about is how --

THE COURT: Speak up.

MR. HAACK: -- how Facebook works, how they interact with Google -- and, I'm sorry, Groupon and how it interacts with Google and Facebook, and that is outside the scope of the direct. It's the functioning of the technology.

THE COURT: But why? You could view it as development of the technology and the steps that go into the development. And wouldn't it be pertinent to that whether they consider whether others have patents as they're developing their source code, et cetera?

MR. HAACK: I don't think unless there is some indication the witness has given that he is or is not part of the process or should or should not be doing that, how that is relevant to how the technology works.

THE COURT: Mr. Desmarais.

MR. DESMARAIS: I agree with the statement that Your Honor just made which is it is directly relevant to the patent and it's also relevant to his testimony on direct about all of this is being done by Google, all of this is being done by Facebook, Groupon has no responsibility here, and I think it's my job to expose that as not true. The

patent in this case goes directly to what this witness testified about on direct, about how the product was designed and what are the steps of the product and whether it is Groupon's responsibility or Google or Facebook's responsibility.

MR. HAACK: Your Honor.

THE COURT: Yes.

MR. HAACK: Your Honor, whether or not it is true what Google or Facebook tell Groupon has nothing to do with an IBM patent. He didn't testify about the patent. He didn't testify he looked at the patent. He didn't look at this patent. He just talked about the interactions with him -- sorry, "him" being Groupon and third parties.

THE COURT: But the question I think Mr. Desmarais wants to explore, the topic is in designing your user interface and how you interact with other third parties such as Facebook or Google, do you take into account patents that may be out there? Why isn't that relevant and also within the scope of the direct that was all about what is your product, how does it work, how did you develop it?

MR. HAACK: I mean it's just has nothing to do with the product development process. It has nothing to do with the functioning of the technology.

THE COURT: I disagree. I will overrule the objection. You can explore this.

(Sidebar conference ends.)

THE COURT: You may proceed when you are ready.

MR. DESMARAIS: Thank you, Your Honor.

BY MR. DESMARAIS:

Q. **As I was asking you, Mr. Breen, more generally, it's true, isn't it, that when you and the others at Groupon are working on developing software for Groupon, you don't review other people's patents to make sure you aren't using technology covered by those patents; right?**

A. **Like almost every software engineer, we're not trained in how to find out how patents work.**

Q. **Right. But my question is you don't look at other patents and try to avoid them. You make a policy not to do that; right?**

A. **There is no policy about that, no.**

Q. **But you don't do it as part of your job when you are designing new products; right?**

A. **Not normally, no.**

Q. **And so if there was a patent out there that was about runtime creating, at runtime creating a new account based on an identifier, you wouldn't even know about that; right?**

A. **If we didn't use the patent, we wouldn't find that patent.**

Q. **If you were told about that patent, if you were told about that patent, would you have taken it into account?**

A. **I'm not sure what taking it into account means.**

Q. **Isn't it true, sir, that at your deposition you told us that Groupon has made no attempts to avoid the '346 patent?**

A. **I don't recall saying that, no.**

Q. **At your deposition is in your book and I would look at line -- excuse me, page 212, line 9.**

A. **I'm sorry, what part of my book?**

Q. **Page 212, line 9. And I'm going to ask you whether you were asked the follow questions and whether you gave the following answers.**

MR. HAACK: Is this an impeachment or just having him read his deposition?

THE COURT: I'm not sure.

MR. DESMARAIS: It's an impeachment, but I can make it more clear if you would like, Your Honor.

THE COURT: Make it more clear.

BY MR. DESMARAIS:

Q. **Mr. Breen, now that you have your deposition in front of you, let me ask you this question, it's true, is it not, that Groupon has not made any attempt to design any of its website, its mobile website or its mobile applications to get around the patents in this case?**

A. **Like I said, I don't know.**

Q. **And that's true, isn't it, sir, you just don't know?**

A. **I'm not aware of everything that happens at Groupon.**

MR. DESMARAIS: Thank you, Your Honor. No further questions.

THE COURT: All right. Redirect.

MR. DESMARAIS: Your Honor, I probably should have marked my demonstrative. The next one in order is Plaintiff's Demonstrative Number 7.

THE COURT: Okay.

MR. DESMARAIS: I don't have a sticker.

THE COURT: Just for the record, Plaintiff's Demonstrative 7 is what Mr. Desmarais has been marking up on the yellow pad during the cross-examination.

REDIRECT EXAMINATION

BY MR. HAACK:

Q. **Mr. Breen, Mr. Desmarais put a checkmark next to Groupon's code on the signup page. Do you see that here on Plaintiff's Demonstrative Number 7?**

A. **Yes.**

Q. **And there is some Groupon code on the signup page; correct?**

A. **Yes.**

Q. **Is there other code on the Google signup page -- I'm sorry, strike that. Is there other code on the Groupon signup page?**

A. **Yes.**

Q. **What is that code?**

A. **Some of that code is the Google SDK and the Facebook SDK.**

Q. **Where does the Google SDK come from?**

A. **It comes from Google's servers.**

Q. **How does it get on to the browser?**

A. **The browser downloads it from Google's servers.**

Q. **How does the browser know to download it on to Groupon's servers?**

A. **There is a reference to it in the -- there is a link to it in the page.**

Q. **Mr. Breen, if you look at your witness binder, the white one and turn to PX-1045.**

A. **Yes.**

Q. **And do you recognize this document?**

A. **I do.**

Q. **On the first page of this document, there is a section that says load the Google platform library. That is the SDK you're talking about?**

A. **Yes, it is.**

Q. **What does it say right underneath that?**

A. **You must include the Google platform library on your web pages that integrate Google sign?**

Q. **This is an instruction from Google?**

A. **Yes.**

Q. **Does Facebook follow that instruction? Sorry, does Groupon follow that instruction?**

A. **Yes, we do.**

Q. **And this next line starts at script SRC, can you tell us and the jury what that is?**

A. **Sure. The script tag is a part of HTML, it's what builds the web page and the SRC is identifying the source of that script, basically telling the browser where it downloaded that file from. And the URL is the value of that source, that API at Google.com, JS platform JS web page which is an URL on one of Google's website.**

Q. **Is this similar to how SDK gets into the browser?**

A. **Yes.**

Q. **Is that also at Facebook's direction?**

A. **Yes.**

MR. HAACK: Your Honor, I would like to offer Plaintiff's Exhibit 1045 into evidence.

THE COURT: Any objection?

MR. DESMARAIS: No, Your Honor.

THE COURT: It's admitted.

(Plaintiff's Exhibit No. 1045 was admitted.)

BY MR. HAACK:

Q. **So Plaintiff's Demonstrative 7 here isn't really accurate, then, is it, sir?**

A. **No, the signup page is not entirely Groupon code.**

MR. DESMARAIS: I'm not sure he should be writing on my demonstrative.

THE COURT: I'm not sure about that. But we'll note that an X was just marked next to the first check.

MR. HAACK: I'll refrain in the future, Your Honor.

BY MR. HAACK:

Q. **And the next line of Mr. Desmarais' exhibit is receiving an identifier. Do you see that?**

A. **No, I don't.**

Q. **You certainly do not.**

Now, do Google user -- I'm sorry, do Groupon user accounts have a user ID?

A. **Yes.**

Q. **And where does that user ID come from?**

A. **Groupon generates it.**

Q. **Does Groupon generate a user ID when a user signs up with Facebook?**

A. **Yes.**

Q. **Do they generate their user ID when a user signs up with Google?**

A. **Yes.**

Q. **And this last bit, creating a new account based on the identifier. Could you flip to Defendant's Exhibit 208, Mr. Breen.**

A. **Okay.**
Q. **And on this document, this is a Facebook document again; correct?**
A. **Yes, it is.**
Q. **And the first paragraph here labeled number one account creation, what is Facebook telling users of the login feature like Groupon that they can do?**
A. **They can create an account in their own app.**
Q. **And Groupon has received similar instructions from Google; correct?**
A. **Yes.**
Q. **Now, we talked a little bit earlier, Mr. Breen, about Groupon's interactions with both Facebook and Google relating to this feature. Do you remember that?**
A. **Yes.**
Q. **At any point in that discussion did anyone from Facebook say hey, you guys shouldn't look at these patents?**
A. **Did you say should or should not?**
Q. **Should.**
A. **No, no one said you should look at these patents.**
Q. **No one mentioned patents at all?**
A. **No.**
Q. **What about from Google?**
A. **Nobody from Google said we should look at patents.**
Q. **Did anyone from Facebook mention that Groupon might**

need a license to use this feature?

A. **No.**

Q. **What about Google?**

A. **No.**

Q. **And Mr. Breen, you mentioned you don't read patents typically when you're building a product. Why is that?**

A. **I'm not trained as an attorney and I don't know how to find relevant patents.**

Q. **And then I would like to return to one other thing that we discussed earlier, which is -- I'm sorry, you discussed it with Mr. Desmarais. He put up a diagram to talk about both the user and the client. I want to clarify your understanding what would be what in that figure. So in a figure like that, you as one of the engineers who developed features like this, how who you understand the user to mean?**

A. **The user would be the person who is visiting the website.**

Q. **And what about the client?**

A. **The client is a browser.**

Q. **And in the case of Facebook sign on that browser, does it include Facebook code?**

A. **Yes.**

Q. **And what code in that browser makes those requests to Facebook that Mr. Desmarais talked to you about?**

A. **Facebook SDK.**

Q. **Is that also the same with Google?**

A. **Yes.**

MR. HAACK: No more questions, Your Honor.

THE COURT: Okay. You may step down, Mr. Breen. Thank you very much.

MR. HAACK: Release the witness?

THE COURT: Any objection?

MR. DESMARAIS: No, Your Honor.

THE COURT: Okay. You are also released, Mr. Breen.

(Witness excused.)

THE COURT: Groupon may call its next witness.

MR. HADDEN: Groupon calls Arun Iyengar. He's the IBM inventor on the '601 patent. IBM did not bring him as a witness, so we are calling him by deposition.

THE COURT: Okay. About how long is the deposition testimony you intend to play?

MR. HADDEN: I think it's ten to fifteen minutes, Your Honor.

MS. SHAMILOV: It's seven now because after today's discussion.

THE COURT: Seven minutes. We'll turn the lights down, please.

(Video deposition of Arun Iyengar:)

"Question: Good morning, Dr. Iyengar. Could you state and spell your name for the record?

"Answer: Arun Iyengar. A-R-U-N, I-Y-E-N-G-A-R.

"Question: Where do you work, Dr. Iyengar?

"Answer: IBM.

"Question: I am handing you a document I'm marking as Iyengar Exhibit 1. I think Exhibit 1 is the '601 patent. Do you recognize that?

"Answer: I do.

"Question: That's a patent in which you're the sole inventor; is that right?

"Answer: That is correct.

"Question: And it's a patent that you are here to testify about today on behalf of IBM; correct?

"Answer: That is correct.

"Question: I would ask you to look in Exhibit 1, the '601 patent, to column four. It is around line 13. There is a heading a little bit above that and it says, 'The HTTP protocol and the Worldwide Web.'

"Do you see that?

"Answer: I see that line.

"Question: And below that, it says, 'The most compelling application of the present invention is for browsing the Worldwide Web via the HTTP protocol.'

"Do you see that?

"Answer: I see it.

"Question: Why is browsing the web the most compelling application of your invention?

"Answer: The patent application, the primary motivation behind it was for people using web applications.

"Question: Right after the text, we look at you -- the patent cites a Hypertext transfer protocol including a URL. Do you see that?

"Answer: I see it.

"Question: And it lists as the first author T. Berners-Lee. Do you see that?

"Answer: I see it.

"Question: Is that a reference to Tim Berners-Lee?

"Answer: That is correct.

"Question: And Tim Berners-Lee is the person who invented the Worldwide Web at CERN in Switzerland; correct?

"Answer: Is that a statement or question?

"Question: It's a question.

"Answer: He is often credited as being one of the key inventors of the web.

"Question: Do you have any reason to dispute that?

"Answer: Tim Berners-Lee deserves considerable

credit for his many contributions to the web.

"Question: The next sentence in the patent goes on and says, 'In other words, a web browser can be used to access information from servers all over the world by simply pointing and clicking on Hypertext links.'

"Do you see that?

"Answer: I see that.

"Question: Is that a true statement?

"Answer: Within the context of the patent, I think that's a proper statement.

"Question: So if we go back to your definition of conversation at or around column seven, line 20, so if I'm on page PI, and it has a series of links, and if I click on one of those links, I will go to page PI plus one, and the conversation will continue; right? We agreed to that, correct?

"Answer: Right.

"Question: So now if that page PI, if some of the links on that page do not have state information, and I clicked on one of those links, I would still go to page PI plus one. So the conversation would continue, but the state information would be lost; right?

"Answer: I don't -- yeah, when you say a link having -- a link having state information, that -- as I said, that just is unclear, it's unclear what you mean by

that, a link having state information. So the request is too imprecise and unclear for me to address.

"Question: What don't you understand about a link having state information?

"Answer: What you mean by that term.

"Question: Do you recall providing any prior art when this patent was being prosecuted?

"Answer: So the major piece of prior art, sure, I was -- the two ones were HTML forms, and at that time it was known as Netscape, you know, Netscape had invented cookies, so sure.

"Question: You didn't invent referrer fields, did you.

"Answer: I did not invent referrer fields.

"Question: Okay. And do you refer --

"Answer: And to repeat my previous statement, I did not invent the web, either.

"Question: I appreciate that. Do referrer fields solve the problem of maintaining state on the web?

"Answer: Referrer fields do not. It's a totally separate problem.

"Question: And is it a fair statement to make that today, the dominant mechanism for maintaining state on the web is cookies?

"Answer: Well, in many cases, I think that --

yeah, cookies are -- it would depend on the application, but certainly cookies really come to mind when people think about state preservation, sure.

"Question: Does IBM use cookies to maintain state on its website?

"Answer: So I have not even definitively looked at how IBM manages its website. But it certainly, given the number of websites that IBM has, they almost certainly are using cookies in certain circumstances, because they have -- it's not just their home page for their www.IBM.com. There are a whole set of other pages and applications, and within that slew of things, they are certainly using cookies to a large extent.

"Question: Are you aware of any websites that IBM operates that use your method of dynamic argument embedding to preserve state?

"Answer: I am not.

"Question: To your knowledge, are there any IBM products that your invention was used in?

"Answer: I am not aware of any IBM products which use my invention.

(End of videotape.)

THE COURT: Is that it?

MS. SHAMILOV: That is it, Your Honor.

THE COURT: All right. What's next?

MS. SHAMILOV: Your Honor, we have another witness that will go for a while. I'm not sure if this is the right time to take a break.

THE COURT: We'll give the jury a break at this time. No talking about the case. We'll get you back in a little bit.

(Jury leaving the courtroom at 10:30 a.m.)

THE COURT: All right. We'll be in recess.

(Brief recess taken.)

*** * ***

(Proceedings reconvened after recess.)

THE COURT: Anything before we bring the jury in?

MR. DESMARAIS: No, Your Honor.

MR. HADDEN: (Shaking head no.)

(Jury returned.)

THE COURT: All right. We are ready to proceed. Groupon will call its next witness.

MS. SHAMILOV: Thank you, Your Honor. Good morning.

Ladies and gentlemen, Groupon calls as its next witness Mr. Paul Davis who is a founding developer of Amazon.com website.

THE COURT: Okay.

... PAUL DAVIS, having been first duly sworn, was examined and testified as follows ...

THE COURT: Good morning, Mr. Davis. Welcome.

MS. SHAMILOV: Your Honor, may I approach the witness?

THE COURT: You may. Yes.

(Binders passed forward.)

DIRECT EXAMINATION

BY MS. SHAMILOV:

Q. **Good morning, Mr. Davis.**

A. **Good morning.**

Q. **Would you please introduce yourself to the jury?**

A. **Hi. My name is Paul Davis.**

Q. **What do you do, Mr. Davis?**

A. **I am a software developer. I live just outside of Philadelphia. And I started a company that creates software for recording, editing, and mixing music. And that's what I do for a living now.**

Q. **Sir, you are a software engineer?**

A. **Yes, I am.**

Q. **How long have you been a software engineer?**

A. **I've been a programmer for about 35 years.**

Q. **If my math is right, that is going back to the 80s?**

A. **Yes, that's correct.**

Q. **Are you the founder and developer of Amazon.com's website?**

A. **Yes, I am.**

Q. **Before we get to that and talk about the website, can you please tell us a little bit about your background and your education?**

A. **Yes, sure. I'd be happy to.**

So I was first introduced to computers by my stepdaughter when I was in my early teens, and probably in the late 70s. I didn't start doing anything with computers myself really until I was at college where we began to have access to small computers to work on.

My undergraduate degree was in, was actually in biochemistry and molecular biology, nothing to do with computers at all, but I got interested in a new field of computational biology which attempts to use computers to try to solve or investigate biological questions and moved on from my undergraduate degree to a graduate program which specifically was computational biology.

It only took a year for me to realize I was a lot more interested in software and computer and that sort of thing than in the biology or the biological research that I was doing. So I left of the graduate program and took a job as a software developer, and I have been doing that ever since.

Q. **Did you grow up in London, and the education you mentioned was in the U.K.?**

A. **Yes. I grew up in London, and I did my undergraduate**

degree at Fort Worth (phonetic) on the south of England. And my undergraduate program was at the European Molecular Biology Lab in Haverford, Germany.

After I left that program, I went back to England for about a year and-a-half and then move moved to the U.S.

After a couple of moves, I ended up in Seattle.

Q. **Once you were in Seattle, what did you do then?**

A. **I worked for a couple of small companies when I first arrived in Seattle, and then took a job in the Computer Science and Engineering Department at the University of Washington.**

Q. **And when were you working on the Computer Science and Engineering Department at the University of Washington?**

A. **I started working there in 1990.**

Q. **And how long were you there?**

A. **I was there for about four years.**

Q. **And what did you do at the universities?**

A. **My official job title there was Systems Programmer II. I had a variety of responsibilities there. The primary one when I arrived was being assistant administrator for a couple of large scale computers that the department used for research. I was involved a little bit incorporating systems research myself.**

But in 1993, I got assigned the task of getting

the Computer Science Department on to what was then brand new World Wide Web, and that became the bulk of my job from that point on up until I left.

Q. **How did you add the Computer Science Engineering Department to the World Wide Web? What do you mean about that?**

A. **Well, we, the department had heard about the World Wide Web and concluded that they ought to be on it. They were a computer science department and it was supposed to be a computer science thing. So I was tasked with setting up a web server for the department, and that meant using a web server. We used a web server called HTTP which was written by Tim Berners-Lee.**

We used a web browser within the department. That was the first graphical browser called Mosaic. And it was written by a team of people. And we used standards part of the web as they are now called HTTP and HTML, and that technology was the stuff I brought together and configured and administered and headed up the website for the department.

Q. **When you did that and set up a website for the Department of Computer Science, how many websites did the university have already?**

A. **There was only one other website at the University at that time. That was run by the Business Department, but it**

wasn't a public website. It was only for use by the members of the Physics Department for their own purposes.

So the Computer Science Department's website was the first one at the University of Washington. In fact, as far as I know, it was the first one in the Pacific Northwest to be accessible to the public.

Q. You mentioned Tim Berners-Lee. We heard this name already throughout the trial. Who is Tim Berners-Lee?

A. Tim Berners-Lee was a computer scientist who worked at CERN in France. It's a European particle physics research lab. When he was working at CERN, he was interested in ways of distributing and sharing information in ways that even wasn't possible, it wasn't easy at that time. And as part of the interest in that, he developed both the first web server and the first web client and also the specifications that actually made up the World Wide Web. They describe how the whole thing was supposed to work.

Q. Did Tim Berners-Lee patent the World Wide Web?

A. No, he do not.

Q. Do you know why not?

A. Sure. I mean Tim Berners-Lee has talked a lot about this during his career, and he felt very early on and continues to feel that the World Wide Web could only really reach its full potential if it was available for everyone to use without having to pay license fees or sign agreements

and so on and so forth. So it was very important to him really from the start of his work on the web that the technology he was creating would be freely available for anyone to use for whatever purpose they wish.

Q. Did he dedicate his technology to the public?

A. Yes, he did. In 1993, he got the agreement of his employer, CERN, the physics research lab, to dedicate all of the technology and intellectual property that he created in connection with the web into the public domain so they became free for anyone to use for any purpose at all.

Q. So you mentioned the HTTP and HTML specifications that he used to generate, to create the website at the University. How did you use these standards?

A. Well, these two standards are sort of the core of what makes the web work. So HTTP is a protocol or a specification for the types of messages and types of requests and response that are exchanged between a web browser and a web server. An HTML is a specification or a standard that describes how to create web pages or how to have a certain kind of appearance, have a certain layout and certain content on them. So they're both totally fundamental to how the web works, how the web site works, so we would use those all the time for the department's website. Obviously, our web server used HTTP as did our web browsers to talk to each other and all the pages that we

would create were all using HTML to construct them and lay them out and give them a certain kind of appearance.

Q. **Now, when you were using these standards to build a website at the of Washington, did you encounter any limitations with these standards?**

A. **Well, when we started using the web in the department, we would just using it to display things like faculty and research interest or list of events that were going on in the department or map of the building and so forth. And for those kinds of things, the web as it was back then was completely adequate for what.**

But after a short period of time, both myself and other people in the department started to get interested in what else do we do with the web? More dynamic things, more interesting kind of interactions. When we stopped to do think about that, we began to realize there was a fairly fundamental problem with the technology of the web as it was right then.

Q. **What was the problem?**

A. **Well, the problem is that web servers at least, you know, as they existed back then had kind of amnesia. Every time that a web browser would send them a request for a page, they would forget everything that had come before.**

So if a user were sitting in front of your web browser and you linked on a link and that sent a request

back to the web server and you got a page back. And if you had a link on the web, you clicked on that, that that would send another request to the web server. The web server sees the two requests completely disconnected from each other. They had no clue whatsoever that, oh, the person was looking at the page the first time and he clicked on the link and now they decided to move on to this next page. It just saw each request as a completely independent unrelated thing. You know, there was no continuous, no continuous interaction at all.

Q. **Was there a name to this amnesia problem that you just described?**

A. **Yes. In the software world, we referred to HTTP, which is the protocol defining these requests or responses, as a stateless protocol.**

Q. **Why do you refer to that? Why did you refer to that as the stateless protocol?**

A. **It's mostly to contrast what we called stateful protocol. So a stateful protocol is where messages are sent from one to the other and both ends are keeping track of what happened so far, so at any time they both understand what has already happened and they might conceivably modify what they doing in response to what has already happened.**

If you -- so we would call that a stateful protocol because both ends keep state. HTTP, by contrast,

neither end at that time would keep any state at all. It would just forget, and so we call that a stateless protocol.

Q. **How did you solve this statelessness problem of HTTP on the website you were building for the University of Washington in 1993?**

A. **Well, I realized, after not much consideration really, that what we needed to make happen was there would be some piece of information that would go back and forth with each request from browser to the server, with each response from the server back to the web browser that would be constant throughout the whole time that you were interacting with it. So each time you clicked on a link and it would send a request back to the server, this piece of information would go with it. And when you got the page back, the information came back. Now both sides have some way to actually keep track of what has happened so far.**

Q. **Now, how did you -- was there a name for this piece of information you have just described?**

A. **Yes. We called it a session ID.**

Q. **Now, where did you put this session ID in your website that you created for the University of Washington?**

A. **So, there were two places that we need to make sure that the session ID would show up. So if you are looking at a web page, there are two types of entities on the page, two things on a page where we needed to make sure there was a**

session-up.

The first of them would have been links that sent a request back to the server where you got the page from, things that you just click on and you get a new page. And second one was if there was a form on the page. Most of you have probably filled out a form on a web page. There would probably be some buttons to make choices, perhaps a field to type in and press a button to submit.

We also had to make sure when you press the submit button and it sends a message back to the server, that would also contain the session ID that we had generated for you.

Q. **And did you patent your solution that you just described, that you developed at the University of Washington in 1993?**

A. **No, I did not.**

Q. **Why didn't you patent it?**

A. **I think that some ideas and some inventions are just better off if they're freely available for everyone to use. And I think if you think about the Internet as a whole, if that had been patented, we would live in a very different world now and one that was not as good as one we live in, I think. And this was an idea that I thought fell into the same category.**

Q. **When did you leave your job at the University of**

Washington?

A. **I left it in the fall of 1994.**

Q. **And what did you do next?**

A. **I went to work for Amazon.com.**

Q. **Can you explain to us how you got to be employed by Amazon.com in 1994?**

A. **Sure. So Jeff Bezos, the founder of Amazon.com, had already made the decision he was going to start his new company in Seattle. And he had been trying to figure out how to recruit people. He had a contact in his previous job that put him in touch with a member of the faculty at the University of Washington in my department. That faculty member knew that I was the web guy in the department and Jeff was looking for web people, so he forwarded on Jeff's e-mail to me. And I thought, well, this sound interesting, at least more interesting in my university job at that point.**

So I met with Jeff, you know, I think three times during the summer, and we talked about ideas for what the life was going to be and what the company was all about. And by the fall of 1994, I had agreed to work at his new company.

Q. **So when you started your work at Amazon.com in 1994, who else was already working there?**

A. **Well, obviously Jeff was there. His wife McKenzie**

worked part-time doing some accounting stuff for what was a very small company. There was one other programmer, Michele Kaplan who Jeff had hired in parallel with me, and then myself. So I generally think of myself and describe myself as the second employee at Amazon.

Q. And where were Amazon's offices back there in 1994?

A. As legend tells it and fact as well, we were in a converted garage on the side of the house that Jeff was renting in Bellevue, Washington.

Q. I would like to draw your attention to one of the documents that's in your binders. It should be one with a tab that's DX-0399. Let me know when you're there, please?

A. Yes, I have that before me.

Q. Have you seen this document before?

A. Yes, I have.

Q. And what is this document?

A. It's a copy of my employment with Amazon.com.

MS. SHAMILOV: Your Honor, I like to move DX-0399 into evidence.

THE COURT: Any objection?

MR. OUSSAYEF: No, Your Honor.

THE COURT: It's admitted.

(DX-0399 was admitted.)

BY MS. SHAMILOV:

Q. I think we can probably view it on the screen which

may be easy for everybody in the room. Is this the first page of the agreement that you just found in your binder?

A. **Yes, it is.**

Q. **Let's start at the top, please. What is the date on this agreement?**

A. **The agreement was dated November 4th, 1994.**

Q. **And there is a name there. Is that your name?**

A. **Yes, Paul Barton-Davis. At the time I signed this agreement, my last name was Barton-Davis.**

Q. **The top of the agreement says it's an agreement between you and Cadabra, I think. Do you see that?**

A. **I do.**

Q. **What's Cadabra?**

A. **Cadabra was the name that Jeff had originally incorporated his company under. Within a few months of me starting work there that name was changed.**

Q. **What was it changed to?**

A. **It was changed to Amazon.com.**

Q. **Is Cadabra, Inc. and Amazon.com the same company?**

A. **Yes, they're the exact same company.**

Q. **What is the origin of Cadabra?**

A. **My recollection is not completely clear. My recollection is Jeff got this name from abracadabra. I know that there was some talk that it sounded a bit too much like a cadaver, a dead body, so it didn't seem like an ideal**

mate, so we changed to Amazon.com.

Q. **Makes sense. If I could have you turn to page -- it should have numbers in there -- Davis 0012 in the employment agreement. Let me know when you're there, please?**

A. **Okay. I'm on that page now.**

Q. **Do you see there an Appendix B on that page?**

A. **Yes, I do.**

Q. **There is something there called stateless CGI compatible WWW backends, and there is some text in there. What is this about?**

A. **This is a description of the technique that I just described to you that I had implemented while I was at the University of Washington so it was possible to have stable interactions with a web server.**

Q. **Why is this in your employment agreement?**

A. **I had developed this app at the University of Washington and it seemed reasonably obvious to me of what I knew of our plans at Amazon were that we would face a very similar problem at Amazon. And I didn't want the company to be able to claim this as their own exclusive intellectual property, so I created an appendix to my agreement that contained a description of this and a few other techniques and they were added to my employment agreement with the stipulation that if Amazon used any of these techniques, they wouldn't be able to claim them as their own**

intellectual properties.

Q. **Is that because you wanted others to use it for free?**

A. **Yes, absolutely.**

Q. **Let's talk about that first version of Amazon.com website. Who built the website back in '94 and '95?**

A. **It was built by myself and Mr. Kaplan.**

Q. **When did the Amazon.com website launch?**

A. **It opened to the public in July 1995.**

Q. **Did you test the website before it became public in July of 1995?**

A. **Yes, we did. We ran a test for between one and two months. We did a friends and family test. We basically invited a bunch of friends and a bunch of family to come and use our private version of the website and see how it works, check the ordering process, all the people searching the web. We wanted to get feedback from people to make sure that it actually functioned in the way that we intended.**

Q. **Why did you test the website?**

A. **Any time that you do software development, it's always a good idea to have people test it who are not the people who are developing it because you often will uncover things that you hadn't realized yourself. You do a lot of things on assumptions and ideas about how things should work. And we wanted to make sure there weren't bugs and other problems that we had overlooked. We wanted to do that**

before we opened to the public.

Q. **How did you open to the public in July 1995?**

A. **Really it was very simple. We already had a web address, but if you visited it before we opened, there would have been nothing there, some message like under construction or something like that. We opened, we just made it when you went to that address you actually got our real website that we had developed.**

And the other component of it was to make sure that we got listed on the new website pages. It might seem a little bit crazy at this point in time, but at that time there was a page that came out every day that had a list of all the new websites in the world, really all the new websites in the world just on one page. And at that time that was the primary way that people found out about what new websites had been created. So it was very important to us to make sure that we were on that page. And as luck would have with a name like Amazon, we were in alphabetical order so we were quite close to the top of page. And so those two steps and we were open for business.

Q. **Did people visit the website when you launched in July of 1995?**

A. **Absolutely. We began to get orders immediately after we opened. I think within a couple of months we had sold books to all fifty states and countries around the world, we**

got emails from people in South America, Southeast Asia, thanking us for making it possible to gets books that they couldn't get. I set up a bell on one of the computers to ring each time we got a sale so we would know we were actually selling books. And after two weeks that thing was going off so much that we had to turn it off. It was incredibly annoying and irritating.

Q. Let's look at the screen. Here is, we can see DDX-404. What is this that we are looking at on that screen?

A. This is an early version of Amazon's home page from 1995.

Q. Can you give us an overview of what a user could do back in July 1995 on Amazon.com?

A. Sure. Well, the primary function of the website obviously was to be able to look for books. That was all that Amazon sold at that point, find books and buy them, there was a place you could search catalogs and when you were in the catalog you could say I would like to put this in my shopping cart. We had some recommendations for people, books in particular categories on different topics. There was a way to go and check on status of orders if you had already made, check, you know, whether they had shipped, and when they would ship.

You could also go in and check your account,

change payment information, your name, address and so on and so forth. All of those things are pretty much added up to what the website was at that point in time.

Q. **Did you encounter the same statelessness problem that you encountered at the University of Washington when you developed the website at Amazon.com in 1995?**

A. **Yes, we ran into exactly the same problem.**

Q. **How did you solve it in '95 at Amazon?**

A. **I solved it at Amazon the same way I had solved it at the University of Washington.**

Q. **How did you do that?**

A. **Once again, we needed to make sure that any time there was an exchange between a customer's web browser and our web server that was involved where state was needed to be maintained, that we maintain some information session ID in both the request and the response that came back.**

Q. **What would happen if a session ID was not in a communication between a client and a server that required session ID?**

A. **If there was no session ID in either the request or response, and there was something happening where we needed to maintain state, then the website would just break. For example, if a user had put books in their shopping cart and now it chooses to order them, somehow they get their browser to send the request, and they didn't a session ID, we would**

have no clue what was in the shopping card, we would not know who they were, it was a request out of nowhere saying I would like to buy some books. What books? If the session ID went missing for any of this type of ongoing interaction on the website, the session ID was missing, then the site would break. These people wouldn't be able to order anything. They wouldn't be able to have a shopping cart. The entire website would be useless.

Q. Well, let's talk a little bit about that checkout process. How I could buy a book on Amazon and complete the order in July of 1995. And I think you have some slides here a that may help you; right?

A. Yes, we do.

Q. What do we see here? What would happen, I guess, on this slide?

A. So the whole process would start with the user, perhaps the potential customer starting by typing in our web address at the web browser. He would then send an HTTP request to Amazon's web server. The HTTP request at this point has no session ID, because there isn't a session ID, it's a brand-new user of the website. Our web server could detect there was no session ID, generate a new one and would attach that to the response that is sent back to the web browser. It sees the page and all of the links and the form on the page they were looking at would all have the session

ID present. They might then click on some more stuff and each time that they would click on a link, there would be a new request that would go back to the server. It would have a session ID attached to it each time.

Q. **Now, you mentioned that the session ID gets assigned at the Amazon server. Was there a program that did that at the server back then?**

A. **Yes. So there was a web server run on our machine and within the web server there was the software that we run and that was responsible for managing the whole system.**

Q. **What was the name of that software?**

A. **That software was called Obidos. It was named after a town on the Amazon River.**

Q. **So was that a service writing on the web server?**

A. **Yes, that was a service that ran inside of the web server that we were using at that time.**

Q. **Let's talk a little bit about that checkout process. What would I need to click on, if you will, to start checking out if I assumed I already added some books in my cart to buy?**

A. **So you would be on a page on the website, pretty much all pages would have a link or a button that you could click somewhere that would say buy items now. And when you click on that button, we would send an HTTP request back to the server which would have the session ID in it, and the server**

would know that it was in a path back to first page of the ordering process, there would be three pages in total. They would send back as a new HTML page with a session ID present within it.

Q. Let's talk a little bit in detail about what happens at the server in response to a user clicking on the buy items. Now, what do we see here on the slide, there is some code seems to be flying from the Amazon server on the right to the left of the screen?

A. I appreciate that none of you can read any of this. If you could see it, you wouldn't want to. This is the source code of part of the file that has a key function of the website that we called Cat Sub. And Cat Sub is really the core of how Amazon servers worked at that point to send HTML pages back to you if you were a customer and using the website.

What Cat Subs would do -- let me back up a moment. You need to remember here we're talking about dynamic web pages. If the web page that you want to serve to somebody is just a list of names or dates or a list of cities around the world or a picture, obviously that can just be stored in a file to the web server and when the person sends a request for it, send it back to file, there is no real complicated technology required.

But we're building a dynamic website where the

pages that would come back to you are the customer, the contents would vary depending on what you have already done, if you logged in, if you already put books in the shopping cart, they needed to indicate that.

So the pages that we would send back to you they needed to have some of that content to be dynamic, it has to be more qualified depending on what is taking place, that's why we had to maintain state. Your server isn't going to send back just a file to the computer, it's go to take what we call a template file and it's going to make some changes to that template file and send it back to you and that's what we will be showing you in the web browser.

Q. **With this function Cat Sub, was that part of the July 1995 system at Amazon.com?**

A. **Yes, it was a really central part of how the website worked in July of '95.**

Q. **And was this -- is this the function that would process the template files that you just mentioned?**

A. **Yes, this function will be called from inside the web server, it will be given a name of a template file, some arguments that were basically the information that needed, that might need to be substituted on the page, and would then consent to the file, do the substitutions and send the information back.**

Q. **Is the template file sort of a mockup of a web page**

that would be returned back to the user?

A. **Yes, it was a mockup with the placeholders where we could insert specific information for this customer or for this user.**

Q. **I would like to walk through an exemplary user file that this Cat Sub function might have processed in July of 1995. Is that all right?**

A. **Yes.**

Q. **So I think what is this image that's really hard to see, what does it represent on the left? What is it?**

A. **This is the template called order form page one. And it's the first page of a three-page process of actually ordering books after you put them in your shopping cart at Amazon. And this template would have been processed by our software and the result of that processing would have been sent by the web server back to the user web browser.**

Q. **How would they do this, would it start at the top of the file?**

A. **It would start reading the file and it would read each character of the file and move all the way down. And when it found things that it recognized where oh, I have work to do here, it would stop, do some work and carry on reading and output directly to the file.**

Q. **Let's look at the first chunk of the files so we understand what's going on. What is this that's shown?**

A. **DDX-407 which appears to be the first portion of the template file that you just described. As you may be able to tell, this is an HTML file that has HTML tags for marking up the text. At the very top of it its says H2 which is a title mockup instruction. It says Finalizing our Order is Easy. There is some regular text below that that would show up in the page that the user will receive, you can place your order online, so on and so forth. Elsewhere on the page, there is a variety, there is a couple of links and there is a form specification, this whole page is a form because we're going to have you as the user input some choices and information and we have some links that might be for the user as well.**

Q. **There are three boxes that appear on the slide. What's that first box that says form method post action, what is that?**

A. **This is the HTML tag that tells the web browser what comes after me is a form. The action statement is what will be sent back to the web server to tell it what to do, how to submit this form. And at the end of it, there is four -- there is dollar sign, curly brace, open curly brace, zero, close curly brace. I'm going to pronounce it in all zeros because it's easier to say.**

The Cat Sub function would know that any time it saw dollar zero as it was reading through this file it

should replace that with session ID that is in use for this user. So when that gets back to that user browser, the similar zero would have been replaced by some text that represents the session ID.

Q. **And the dollar zero is that, what's shown on the screen, similar sign, two curly brackets that kind of look like Mustaches, I guess, and a zero?**

A. **Yes, correct.**

Q. **There are two other boxes on this slide. Can you explain to the jury what those are?**

A. **Both of these lines are just regular HTML link specifications. The first one will be displayed with a text why this is safe which is sort of down there to the second line. If you go back to the HREF property of this link, you can see, I hope you can see there is a dollar zero inside of it.**

Again, when our software processes the template, it will replace the dollar zero with the session ID so we end up on the user browser that link has the session ID record as part of the link and then there is a second version of that, exactly the same content except for the text, why this takes longer, and it points to a separate page.

Q. **What did this HREF in the code mean?**

A. **HREF is a HTML, it's part of the HTML specification**

or standard which indicates, it's technically called a URL, it's basically the web address that should be given back to the browser when the user clicks on that link.

Q. **So what would happen when this chunk of the filed of this HTML file would be processed, would get to the user's computer and would be professed by the web browser, what would it look like?**

A. **I think we have a rendering of the top part.**

Q. **Is this what is depicting the part that we just talked about what it would look like to the user?**

A. **That's right. You can see here in the template we had H2 finalizing the order is easy, we have a bold font with the title saying you can place your order online. And below that is the start of the form, and the first thing that the customer need to answer is how they are going to pay for their order, we present them with two choices, a credit card or a check.**

Q. **And now I think there are two links on this section of the page right now?**

A. **Yes, that's right. There are two links shown in blue text and underlined, which is the convention that the web browsers had at that time.**

Q. **Are these the links that responded to the HREF statements in HTML you described?**

A. **Yes.**

Q. **Would these two links have session ID embedded in them?**

A. **Yes. As we saw in the template file, the actual URL for these links had a dollar zero in the template which means the page the browser was seeing, there would be a session ID as part of that link.**

So if the user was paying by credit card, and again it may seem hard to remember at this point, but in 1995 most people were terrified of using their credit card online, we had a page that would explain why it is okay to do this. If there was a click on that link, they would be taken to another page with the session ID, and the page they would get back would again have the session ID in it.

It is absolutely critical to us that we maintain that session ID for all of the user interactions with us. So why does it say that? We take you to another page to explain this and install that. The browser would still have the session ID at that point.

The second choice was paying by check. There is a second link there: Why this takes longer. Again, if they're interested in that question, then they can click on that link. This link has been preprocessed to have the session ID in it, and they would end up on a new page, and it would explain to them why it takes a little bit longer to pay by check. And again when we are on that page, the

session ID is around so you can keep track of the state.

Q. **Let's maybe walk through one more file so we can see how the web page would be built.**

A. **Okay.**

Q. **So now moving on the second chunk of this HTML on the left. What is this?**

A. **So the second set of information that we needed to collect from people as part of the ordering process was e-mail address. The simple thing is to ask them what their e-mail address is. And we give a little input box and you see on the web page somewhere where you type in your name or e-mail or something. So you get a box like that.**

Remember, the user might already be logged in and they might already have given their e-mail address from their past interactions with us. And if we had that, we want that to show up in the box already. So we indicate, hey, we know your e-mail already. And perhaps they might change it, but at least the one they had given us before would be there.

So there is a line right in the middle of this block that says "my e-mail address is" ... and a spot followed by a HTML tag input that says we're going to put one of these text boxes you type into. At the end of this HTML tag, you will see once again dollar sign curly brace, 2, close curly brace, another placeholder.

So software, when it would see this, it would know, oh, I have to see if I have an e-mail address to this person. And if I do, substitute it here. And if I don't, then just leave it blank.

Q. **So how would this chunk of the template file and process sent to the user and processed by the web browser look on the screen?**

A. **So we have a slide for this.**

So this is the next section. Again, we just ask them what is your e-mail address? My e-mail address is ... and you can see there is a little input box.

Now, in this particular example, this is what a user would see if we didn't have their e-mail address.

If we did have their e-mail address because they were already logged in and we knew it, we would have prefilled that box in with their e-mail address.

Q. **And so would the software, this function and the service running on Amazon's server do sort of process the other chunks in this file --**

A. **Yes.**

Q. **-- one at a time?**

A. **It would read all the way through the file, deal with each session as it goes looking for these placeholders, deciding it should substitute for the placeholders. And eventually when it processes the whole file, that all would**

be sent back to your web browser so that you can see the final page.

Q. **And is this sort of the result, the resulting web page that the user may see?**

A. **Yes. So this is the final full page with all these four sections where we ask what the choice is, and then a fifth step where there is a button you can press. When you press the button, that submits the whole form and sends it back to the web server.**

I mentioned early there was a specification at the top of this file which had dollar zero in it. When they press this button, the form action statement they actually used has been changed and it has a session ID in it. So when they click this button and the HTTP request is sent to the web server, it goes with the session ID as well as the other information that they added.

Q. **So in July of 1995, was there a web page on Amazon.com that looked exactly like this?**

A. **It probably wouldn't have looked precisely like this, pixel for pixel, but this is, you know, an accurate rendering of what the user would have seen on the first page of the order process.**

Q. **And there are some links on this page that I would like you to explain. I think you already explained the links in the first step which is why this is safe and why it**

takes longer; correct?

A. Yes, I did.

Q. And these included session IDs, is that right?, embedded in them?

A. Yes, they did.

Q. And you also talked about the button that the user would click to submit the order; am I right?

A. Yes.

Q. And that button would also include session ID embedded in it?

A. Yes, it would.

Q. There are two other links on the web page or I think there are.

What is this? I think it says skip to step 5. I know it is a little lard to say. But it says, is this order a gift? In parentheses, you can skip to step 5. And skip to step 5 is underlined?

A. Yes, that is another link. Now, this link is a little different than the others. The image, you are looking at this on a tall screen where you can see the whole page, but you are on a page where you could maybe see down to the first line of this gift order section and it's not a gift order.

So I just want to skip over this section, so I click on that link. This link, unlike the others I

discussed, this doesn't send a request back to the web server. This is a link that tells your web browser -- can you scroll the page so that I can see the point that is indicated?

So if you had been looking at this on a small screen and let's say the bottom third to a half of the page was off the bottom of your screen, you clicked on that link. Your web browser would have scrolled the page up to make sure that step 5 was visible to you. No interaction with the web server. This is all, all internal to your web browser.

Q. Thank you. I think there is something else here in blue and underlined. And I do think it is sort incomprehensible from this area here. But it says: Though we have tried hard to make this form easy to use, we know that it can be quite confusing the first time. If you have any difficulty send an e-mail to help at Amazon.com or just call the number.

Do you see that to the screen?

A. Yes, I can see it.

Q. How did Amazon.com -- and that is in blue and underlined kind of similar to the other links we talked about. Why is that?

A. So this is another link. Somewhat like the last one, this is a link that also has nothing to do with sending an

HTTP request back to a web server. If you click on this link, at least in 1995, what would have happened is if your web browser would have started up with some e-mail application, perhaps another HREF or one of the other tools around. And it would have started off, you write an e-mail message and the to address would have already been prefilled with help at Amazon.com.

So, once again, clicking on this link does not send a request back to the web server. It asks your web browser, can you please make it possible for me to send some sort of e-mail to this address? And the exact way that the web browser does that is up to the browser, and that is changed over time. If you use Gmail, for example, right now you click on this, probably you open a new tab in your browser. But in 1995, the way a browser would have done that, you would have styled up an entirely separate page to write the e-mail.

Q. **And just to be clear, eventually an e-mail may get to the Amazon.com server that the user may send?**

A. **Presumably, yes.**

Q. **But not when the user clicks on?**

A. **Not when the user clicks on that link.**

Q. **So what would happen if, in July of 1995, I would click on this button to continue with my order?**

A. **So this would send the completed form with a session**

ID back to Amazon web server. We process that and realize, oh, now you need to see page 2 of the order process, which is fairly simple. It just shows what items you are ordering and change the quantities, specify the shipping address.

There would be another button you can press that would send that data back to Amazon's web server with a session ID, and say, okay, now we need page 3. Send that page back.

Page 3 was basically you can't change anything about your order right now but click here to actually buy stuff. And if you click that, we now have an actual order from the customer. It would go into the backend of that computer system, and we start processing that, ordering books, arranging people to see what you order.

Q. **Now, is the ordering process that you just described, is that how it works, the ordering process works in July of 1995 on Amazon's website?**

A. **Yes, it is.**

Q. **How can you be so sure?**

A. **Because I am the person who wrote the code and ran the web server and the website on which this all functions.**

Q. **If I could draw your attention in the pocket of your binder there, there are two CDs, and the first disk is marked DX-375. Do you see that?**

A. **I do.**

Q. **Did you inspect this disk?**

A. **Yes, I did.**

Q. **What is on that disk?**

A. **There is a copy of the Amazon.com source code for the website from June of 1995.**

Q. **Did you recognize the source code when you reviewed it?**

A. **Yes, I did.**

Q. **Was that the code you wrote when you were at Amazon in 1995?**

A. **Yes, that's the code. It is the code that I wrote while I was at Amazon.**

Q. **And based on your inspection, do you believe that that is the code that was on the site at that time running it?**

A. **I'm absolutely confident that that is the website -- that is the source code that was on the website at that time.**

MS. SHAMILOV: Your Honor, I'd like to move DX-375 into evidence under seal.

MR. OUSSAYEF: No objection.

THE COURT: It's admitted under seal.

MS. SHAMILOV: Thank you.

(DX-375 was admitted into evidence under seal.)

BY MS. SHAMILOV:

Q. **There is a second disk I think there as well, and that should be marked DX-376. Do you see that?**

A. **I do.**

Q. **And did you inspect that?**

A. **Yes, I did.**

Q. **And what is on that disk?**

A. **This is a copy of the Amazon source code from June of 1996.**

Q. **Now, when did you leave Amazon?**

A. **I left in March of 1996.**

Q. **So did you recognize any files on that disk, DX-376?**

A. **I recognize almost all of the files on that disk.**

Q. **You talked about the template files. Which disk was the template files?**

A. **They are on the June.**

Q. **Did you recognize the template files that you reviewed?**

A. **Yes, I did.**

Q. **And does that disk include source code that you wrote while employed at Amazon?**

A. **Yes, it does.**

Q. **Does that disk include source code that was running the website that you wrote -- that you were running while you were at Amazon?**

A. **The 1996 disk?**

Q. **Yes.**

A. **Yes, it does.**

MS. SHAMILOV: At this time, I would like to move into evidence DX-376, Your Honor, under seal as well.

MR. OUSSAYEF: No objection.

THE COURT: It's admitted. Under seal.

(DX-376 was admitted into evidence under seal.)

BY MS. SHAMILOV:

Q. **Now, the template files that you inspected on, at DX-376, did those template files matched the template files that you used in 1995?**

A. **They were substantively the same or identical.**

Q. **Were there any template files on the DX-375 disk?**

A. **No, there were not.**

Q. **Was there a reason why the template files were not included on, are not on the 1995 disk?**

A. **Yes, there is.**

Q. **What is that?**

A. **When Mr. Kaplan and I were developing the website, we followed fairly standard software development practices, which is to use some or all of the developed system. So as you create the source code, you keep the software and make changes to it, extending it, fixing problems. You keep a record of all these changes so you can look back and see what changed and keep track of different versions. And it**

was obvious to us that, you know, the source code, the software we're writing was important, and we needed to have that in the version control system, which we did right from the beginning.

The template files early on at least just seemed to us like, oh, it's just a bunch of text files. They're not important. They're not the things that we programmers, you know, count on and do stuff with, so we didn't bother to a add them to the version of the control system initially.

Once the website went live, and we began to have to make checks just to an actual live running system, we started to realize actually the template files are really important because as we change the template files, we change what users will see in their browsers. And so we realized, oh, really these template files, they need to be managed in the same way that we control source code. They're just essential to the whole system. So I believe some time in late 1995, we added them to the virtual control system and managed them the same way that we did the source code.

Q. Now, is there anything in the source code on the June of 1995 disk that told you or confirmed that the template files were in fact used in 1995 on Amazon's website in July?

A. Yes, absolutely. I mean throughout the source code, well throughout the source code that is involved with the web server and so forth, you can find calls to the cat sub

that I mentioned earlier where it is provided with a name of the file, the template file and instead of arguments, and once you understand the source code, you can find dozens of places where cat sub is used to process named template file and send the results back to the user. And a substantial number of those cases, even the names of the files, the template files in 1995 is the same as a file that exists on the, in the 1996 version.

Q. **Now, you mentioned earlier we talked about sort of session IDs and Amazon's July of 1995 website that were embedded in links. Were there any links that had a request go between the client and the server that did not include session ID at that time?**

A. **There was some links that did that. They were not a part of this ordering, this ordering process however.**

Q. **So did all the links that send a request from the user's browser to Amazon's server in July of 1995 that required session maintenance of state maintenance, if you will, include a session ID?**

A. **Yes, all the links that required state maintenance at that time did not -- all of the links that required state maintenance would have a session ID in them. And the reason that I know that to be true is because if they did not have the session ID, then it just wouldn't work. We lost track of the user shopping cart. We would have lost track of**

where they were in the ordering process, and so on and so forth.

Q. **So if there were requests that got received by the server that had a bad session ID, would the user be notified that they have to do something about it?**

A. **Yes. For example, one thing we noticed that happened in the early days was something you might have given a link into their -- they were browsing Amazon and they had copied a link out of their browser and sent it to a friend or family member, and that person came back and, well, maybe they themselves came back and used a link at a later type. Well, we had to manage session ID. They didn't last forever. And perhaps we would look at it and say, huh, we don't have any record of this anymore. We had to tell the user what was happening, and we would show them a page or explain why they needed to start over.**

Q. **And is this one of those pages?**

A. **Yes. So once again this is generated from a template file which we have in yellow on the left. After it had been processed, they would see this page to indicate, yes, you did give us a session ID but it's not valid any more, so we need to start a new session. And when they clicked on the link there, there are two links that say please start a new session. The whole process I described to you earlier would start, it would start over, and it would be set up with a**

brand new session ID that would work for them.

Q. **Now, in July of 1995, did Amazon.com's website use cookies?**

A. **No, it did not.**

Q. **Why not?**

A. **So cookies were, at that time, still a very new technology. The idea had been briefly floated by somebody I think toward the end of 1993. There was a discussion going on in 1994 about exactly how cookies were supposed to work. It was a very new technology, and there was a lot of uncertainty in the World Wide Web community of users and developers about the implications of using them.**

Now, remember, with the traditional interaction between the web browser and a web server, you click on a link, it sends a message to the web server, the web server sends back a page, we're done. What cookies introduced was you asked for a page, the web server send it back and it says, oh, by the way, I'd like to create a file on the disk of your computer. And at that time, a lot of people were very wary of this. They thought there was security implications. There was privacy implications. There was a lot of disquiet about the whole notion.

We discussed this quite extensively, the three of us, Kaplan, Jeff Bezos and myself, and we decided that although certainly this technology seemed promising as

a way of maintaining state, it wasn't viable for us as a brand new e-commerce company at that time to use this technology because we feared there would be backlash or people saying, oh, they use cookies. We don't want to use their website.

Q. **Thank you, Mr. Davis. Have you testified at a trial before, Mr. Davis?**

A. **Yes, I have.**

Q. **When was that?**

A. **It was in 2009.**

Q. **Where was that?**

A. **It was actually right here in this courthouse building.**

Q. **And what was the nature of your testimony there?**

A. **My testimony then concerned once again the exact same material that I have spoken with you today, how Amazon maintains state on its website in 1995.**

Q. **Did you review source code of how Amazon.com website worked in July of 1995 in connection with that other case?**

A. **Yes, I did.**

Q. **And the source code that you inspected and reviewed in connection with your testimony today, how does that relate to the code that you were using in 2009?**

A. **It's the same code.**

Q. **And in that case in 2009, did you also review the**

codes, the template files that you talked about today?
A. Yes, I did.
Q. And how did the template files you reviewed there compare to the template files you discussed today?
A. They are the same files.
Q. Now, are you getting paid for your time here today, Mr. Davis?
A. No, I'm not.
Q. Have you received any payments for your help in this case?
A. Well, I had to put in a notable amount of time into preparation for this case which takes me away from my normal job, so I have charged my normal consulting fee for the time that I have spent consulting, reviewing source code and so on in preparation for your trial.
Q. What is your regular consulting fee?
A. $350 an hour.
Q. How many hours have you spent approximately on this?
A. About twenty hours.
Q. Have you issued any invoices?
A. No, I have not.
Q. Do you plan to any issue any invoices?
A. Yes, I will issue an invoice later this summer.
Q. And to whom would you send that invoice?
A. I send that to I assume Groupon's lawyers or Groupon

itself.

Q. **What would you do -- what will you plan to do with the money that you get when you issue an invoice?**

A. **The amount that I receive in compensation for the time I spent working I will donate to the Electronics Frontier Foundation.**

Q. **What is the Electronics Frontier Foundation?**

A. **The Electronic Frontier Foundation is a foundation that is trying to try to work for digital privacy, access to technology and innovation.**

Q. **Why did you select that nonprofit organization over many others?**

A. **When I was asked to participate in this case originally, I wasn't all that interested in the idea. I don't particularly enjoy testifying and it takes a whole bunch of time and I have other things to do in life. Part of my initial feelings about this is I don't know why I want to do this. I have no particular interest in the outcome of the case. I have no connection with IBM or Groupon. I don't even really know the full scope of the case. Part of any instinct was to say no, I'm sure you can do this without my testimony. But then a suggestion was made to me by my brother actually that why don't you participate in the case anyway, and you can take your compensation for the time that you did spend working on it and donate that to some**

charitable organization.

MS. SHAMILOV: Thank you, Mr. Davis. I don't have anymore questions. I may have more, but right now I pass the witness, Your Honor.

THE COURT: Okay. Cross-examination.

CROSS-EXAMINATION

BY MR. OUSSAYEF:

Q. Good morning, Mr. Davis.

A. Good morning.

Q. So I would like to first start with a demonstrative that we looked at during your direct testimony. Now, I just want to make sure we're all on the same page here. This is not actually a picture of Amazon's website that someone took back in 1995 that we're now viewing today, is it?

A. No, it is not.

Q. This is a mockup of the Amazon website; right?

A. It's a mockup of a particular part of what one of the pages would have looked like.

Q. Right. Someone created this image recently; right?

A. I'm not sure which part of the image you're referring to.

Q. Well, the back part that says Amazon.com at the top, it looks like a browser maybe and then it says Finalizing Your Order with the background in gray. That's the part I'm talking about.

A. **Yes, that's correct.**

Q. **Who created this image?**

A. **Someone in Groupon's legal team.**

Q. **So Groupon's lawyers created this image?**

A. **I believe, yes.**

MS. SHAMILOV: Objection, Your Honor. Misleading.

THE COURT: Overruled.

BY MR. OUSSAYEF:

Q. **So you didn't create the image yourself; right?**

A. **That's correct.**

Q. **And this isn't an image from back in the day from Amazon, either, is it?**

A. **No, it's not.**

Q. **Now, this is based on an Amazon file that you see on the left; right?**

A. **That's correct.**

Q. **And that file -- well, what file is that?**

A. **That file is a template file for -- called order-form-page-1.**

Q. **And that file is order-form-page-1.cpp; right?**

A. **No, that's not correct.**

Q. **What is it?**

A. **There is an aspect of the generation template files I haven't explained so far. If you would like me to explain**

that, I will.

Q. No, that's all right. I just want to know whether this is order-form-page-1.cpp?

A. It is not.

Q. It is a different file than order form page one.cpp,, is that what you're telling us?

A. That's correct, it is order-form-page-1.html.

Q. There is no order form page one.cpp on the CDs that you were just talking about, is there?

A. I'm not totally certain of that.

Q. Right. Someone had to change this file from dot CPP to dot HTML; right?

A. Can we go back and actually look at that in my binder a moment?

Q. I just want to -- I'm just asking a simple question here, which is, someone had to change the file that's on the CD to create what we see here on this slide, this mockup; right?

THE COURT: Is there an objection?

MS. SHAMILOV: I object. The witness asked to see the document.

THE COURT: I think it's up to counsel if he wants him to look at the document. You'll have a chance to redirect.

BY MR. OUSSAYEF:

Q. **I'll have you answer the question pending, sir?**

A. **Without being able to read the exact text of the file on the left, I can't answer your question.**

Q. **Did you read the text on the left before you started testifying?**

A. **I have read the contents of order-form-page-1.html and I have also seen order-form-page-1.cpp and I have seen those both before testifying. Which one of those two is on the left I would need to inspect them line by line, there would be differences between the two of them with how the dot CPP file is going to transfer in.**

Q. **Are you telling me you don't know what file is on the left of this slide here?**

A. **I'm telling you it could be either one of those two files, one is a direct result of the other, and for the purposes of my testimony it would make no difference which of the two was on the left.**

Q. **One of those files is on the CD's, but the other file is not on that CD, is it?**

A. **That's correct.**

Q. **And now, the file, again, if we go back and talk about order-form-page-1.cpp, that's not from 1995, is it?**

A. **It's not from 1995.**

Q. **It's from 1996, isn't it, sir?**

A. **It is from 1996, but it's substantially similar to**

the file that we had been using in 1995.

Q. **But it's actually from 1996; true.**

A. **Correct.**

Q. **And you were asked a lot of questions about Amazon's website in 1995 with these slides, weren't you?**

A. **Yes, I was asked questions.**

Q. **Now, we'll get back to the source code and what's actually on the CD's in a moment, but for a moment I would like to take a little detour and ask you a couple of questions to help understand Amazon's system in a little more detail in case Groupon's expert, Dr. Weissman, talks about the Amazon system. Is that alright with you?**

A. **Sure.**

Q. **In the 1995 time frame, Amazon did not have any performance issue embedding and storing state information on its servers. True?**

A. **We didn't measure that type of measure in that time frame.**

Q. **In fact, you know Amazon did not have any performance issues in embedding and storing state information on its servers; true?**

A. **I have testified in my deposition that we were not aware of those problems and we had much larger problems that we had to pay attention to. We did not measure what type of performance we got because it was just not a concern to us**

at that point. Perhaps there were problems, perhaps there weren't, we didn't measure it. We were not aware of any.

Q. **In fact, in the 1995 time frame, there was no motivation for Amazon to embed or store state information at the customer's computer; true?**

A. **We didn't perceive that to be a useful way to spend our development resources.**

Q. **That's not what I asked, though, sir. I asked you a very specific question, which is in the 1995 time frame, there was no motivation for Amazon to embed or store state information at the customer's computer; true?**

A. **Are you asking me whether we personally experienced that motivation or whether it existed in some theoretical sense?**

Q. **I'm asking whether there was any motivation at all in any sense?**

A. **We were aware that there were a wide range of things that we could have done to improve the performance of our system, but the specific caveat of things that you are talking about weren't things that we were interested in doing because the payoff on them would be so small.**

Q. **Could we please play the deposition clip from Davis 109:18 to 110:13.**

"Question: So based on the constraints that existed in the 1995 time frame, Amazon wasn't motivated to

try to save --"

THE COURT: Stop the video. What's that?

MS. SHAMILOV: Not the same question, Your Honor.

THE COURT: Not the same question, so you object?

MS. SHAMILOV: This is not impeachment.

THE COURT: What's the page?

MR. OUSSAYEF: It'S 109:18 to 110:13.

THE COURT: I'll overrule the objection. You can go ahead and play it.

"Question: So based on the constraints that existed in the 1995 time frame, Amazon wasn't motivated to try to save server resources or increase performance by storing state information at the customer's computer instead of on the server side?

"Answer: There -- yeah, there was -- we were entirely focused on customer experience, and because we were focused on the customer experience and because there was no way of that changing our computer infrastructure would really have helped that in any significant way for the majority of customers, it -- it was not -- it was not a thing that we spent much time looking at. It's obvious from the history of the company since then that as bandwidth has gone up, that it became -- that it did become significant.

The company radically overhauled how things were done in subsequent years, but at that time there would have been no motivation for it."

Were you asked that question and did you give that answer?

A. **That was my answer.**

Q. **So let me ask you a little bit about your deposition now that we have seen a clip from it. Groupon's lawyers represented you at your deposition; right?**

A. **That's right.**

Q. **And when you had your deposition taken, you had not seen any of the patents in this case; true?**

A. **That's true.**

Q. **And that's because you have a general rule of never looking at software patents; true?**

A. **That's a substantial part of the reason why, yeah.**

Q. **And even though you hadn't read IBM's patents, you already thought one of them was invalid at your deposition, didn't you?**

A. **I don't believe I indicated that I thought it was invalid at my deposition.**

Q. **So let's play the deposition clip at 28:19 to 29:6.**

"Question: Do you have any opinions about whether the patents in the lawsuit between IBM and Groupon are valid?

"Answer: I haven't reviewed the patents in question, so I'm not aware of in any detail of -- of what they contain. The information I -- I have received about them suggests that -- that I would call at least one -- well, no. I received some loose outline information regarding one of the patents. I haven't read the patent. I don't know the title or anything else about it. What I have been in -- informed of about it suggests that it -- that I would regard it probably as -- as invalid."

Were you asked that question and did you give that answer?

A. **I was asked that question, and I gave that answer, but I don't --**

Q. **Okay. That's all I'm asking, sir.**

So what we just saw is that you didn't even know the name of the patent, but you thought it was invalid; true?

A. **My answer said I thought based on the information I had been given about the patent, not the patent itself, that it was probably invalid. I made no comment on the patent itself.**

Q. **Right, you had no comment on the actual patent itself?**

A. **Absolutely.**

Q. **That's because the lawyers for Groupon described the**

patent to you in a way that made you think it was invalid; right?

A. **Actually, I'm not even sure that they described to me in any detail what was in the patent. What they described to me or actually the interactions that we had about the work that I did at Amazon in 1995 and there have been remarks on the way that have suggested that one of the IBM patents in this case touches upon that work, and had a filing date after I did the work that I have described to the jury.**

Q. **Groupon's lawyers described to you this patent in a way that made you think it was invalid; right? That's how they described it to you?**

A. **I don't think it's accurate to say that they described the patent to me.**

Q. **Let's play the deposition clip from 29:17 to 20?**

"Question: And who described you this patent in a way that made you think it was probably invalid?

"Answer: That would have been the lawyers for Groupon."

Were you asked that question and did you give that answer?

A. **Yes, I did.**

Q. **So now, you reviewed Amazon source code at Fenwick & West 's office; right?**

A. **That's correct.**

Q. **And those are the lawyers for Groupon, Fenwick & West is the law firm; right?**

A. **Yes, that's correct.**

Q. **And your basis for saying that Fenwick & West got the source code from Amazon is based on what Groupon lawyers told you; right?**

A. **It's partially based on that and partially based on the fact that I seen the source code at two previous cases I have been involved in and the fact that I wrote the source code.**

Q. **But of course, you have no idea how Fenwick & West got the source code from Amazon, do you?**

A. **I have -- I was not informed about every single step along the way. The two disks that are in my binder I believe that have been entered into evidence now were both signed by me on August 6th, 2009. They're from a previous case. And in that case I was well aware of the process by which the information on these disks had been generated. I have become important more aware of that because I have been back in Wilmington, and it's strange being back in the same town jogs your memory. Most of the details to the case in 2009 were not on my mind previous. And when I came back here, I remember the meeting I actually had with at the time Amazon's lawyers in the Hotel DuPont where they were**

staying, and I at that time was walked through the exact process by which this had been extracted from Amazon's machine. I was even given personal access to the source code depository that they were taken from and was able to provide more insight to the Amazon employee that extracted that data.

These particular disks that I signed in 2009, I have a very solid understanding of where they came from, an understanding that I did not have some months ago because I had not come back to Wilmington and been reminded of that process.

Q. Sir, I would appreciate if you just answer my yes and no questions yes and no so we move things along. We do have a limited time here. With that in mind, let me ask you another question. The source code you reviewed was organized into a June 1996 folder and a June 1995 folder; right?

A. Yes, that's correct.

Q. But you have no idea who organized the Amazon source code into a June 1995 folder and a June 1996 folder; true?

A. The disks that I signed that are in my folder were produced by an Amazon employee that I met in 2009. I cannot give you that person's name, but I met the employee who is responsible for creating these files.

Q. Sir, that's not my question. My question was, you

have no idea who organized the Amazon source code into a June 1995 folder and June 1996 folder; true?

A. They were organized by the Amazon employee I just mentioned here.

Q. Okay. Let's watch the deposition clip at 97, 3 through 9.

"Question: Who was responsible for organizing the Amazon source code into the "all files June 1995" and "all files June 1996" --

"Answer: I have no idea."

Were you asked that question and did you give that answer?

A. I did.

Q. Okay. So that's all I'm asking you, sir. So let me ask you another question.

You know it wasn't Amazon who created those folders; true?

A. I don't know why you would ask me that question.

Q. I'm trying to get an answer, sir.

A. I don't know how to answer that. Can you rephrase that question, please?

Q. It wasn't Amazon who created the 1995 folder and the 1996 folder; true?

A. The process I was involved in in 2009 that generated these disks involved an Amazon employee.

Q. **Okay. Let's see the clip at 98, 19 to 21.**

"Question: It wasn't Amazon in the 1995/1996 time frame, right?

"Answer: That's correct."

Were you asked that question and did you give that answer?

A. **That is the answer. The answer I gave.**

Q. **Okay. So just to be clear, you left Amazon in March of 1996; right?**

A. **That's correct.**

Q. **Okay. So here we have the June 1995 folder on the Elmo, the March 1996 date when you left Amazon, and the June 1996 date of the other folder. Do you see that?**

A. **I do.**

Q. **Okay. So you don't know for sure that the June 1996 folder was the source code actually running on Amazon's website at the time; right?**

A. **Not, not in any strict legal sense, no.**

Q. **Okay. So I'll put a question mark here on June 1996 then. So let me ask you another question.**

You don't know what changes were made between the time you left in March of 1996 and June of 1996; true?

A. **I wasn't there when those changes were made. Since I have been provided access to the source code, it's possible for me to say what changes whether made.**

Q. **Right. You don't know what changes were made because you weren't at Amazon at the time; true?**

A. **I didn't say that. I said I didn't work at Amazon when those changes were made. Because I have been provided with the source code from both of these folders, because I can inspect the source code, it is possible for me to identify what changes were made.**

Q. **You were not at Amazon in April, May, or June of 1996; right?**

A. **That's correct.**

Q. **And you don't know what changes happened in, for example, June of 1996, do you?**

A. **I wasn't there when those changes were made, but, again, I have been provided with source code as part of this case, and as part of that review, I'm able to identify changes that were made from earlier versions of the code.**

Q. **Let's look at the clip at 118, 24 to 119, 2.**

It's 118, 24 to 119, 2.

"Question: And you don't know what changes happened to the Amazon source code in June of 1996?

"Answer: That's correct."

Were you asked that question, and did you give that answer?

A. **Yes, I did.**

Q. **Okay. So now we've been looking at kind of this end**

of the June 1996 end of this timeline, so let me ask you about the 1995 folder. There is no way for you to prove that what you reviewed from the 1995 folder was actually running on Amazon's website in 1995; true?

A. **I don't know what you mean by the word "prove" in that question.**

Q. **I'm asking if you can prove that this source code in the 1995 folder was actually on Amazon's website at the time.**

A. **I wrote the code, and I ran the website. And I ran the computers on which the website ran. I am the evidence of what Amazon was doing in June of 1995.**

Q. **You don't have any way of showing that what was on the June 1995 folder was actually running on Amazon at the time; true?**

A. **I am telling you that I wrote the code that did that, and I ran the server on which it ran, and the source code in June 1995 folder is what ran Amazon website in June of 1995.**

Q. **Let's look at the clip at 94, 24 to 95, 9.**

"Question: In fact, you weren't there in June of 1996, right?

"Answer: I'm -- I'm -- I'm --

"I'm backing up and saying, even if you ask me this about 1995, when I did work there, I would not be able to prove to you that the source code marked -- or I think

there are more files from 1995, I couldn't prove to you that that was used on the web server."

Were you asked that question and did you give that answer?

A. I was, but I'd like to explain that answer.

Q. That's okay. I'll continue ask the questions, sir.

And you know, don't you, sir, that the 1996 folder contained functionality related to state information that the 1995 folder did not; true?

A. Yes, that's correct.

Q. Okay. So let me ask you a couple more questions about the 1995 templates. So you would agree with me that you would certainly have to consider the content of the Amazon templates to figure out whether Amazon embedded state information in all hyperlinks in a template file; right?

A. Yes, that's correct.

Q. Okay. Now, I do want to take a look at one of your demonstratives here and make sure I got it right. So here we're looking at the part of the file we were talking about earlier with the e-mail link. Do you see that there?

A. Yes, I do.

Q. Let me zoom in a little bit.

THE COURT: DDX-413, is that right?

MR. OUSSAYEF: Yes, that is my understanding.

BY MR. OUSSAYEF:

Q. **And now if we look at this, it says: Send e-mail to A HREF equals, and then it has an e-mail address; right?**

A. **That's correct.**

Q. **Okay. And I think you testified to this on direct but I just want to make sure. This is a link, right?**

A. **As you were setting up this question, you used the term hyperlink and whether I could be sure all hyperlinks had a session ID. You just asked me now about whether it is a link. And if you wanted to me answer a question about it, I want to make sure you are, in fact, differentiating between those two things.**

Q. **Sure. That makes sense. So let me ask you, is this a hyperlink that we see here?**

A. **In technical terms, no, it is not a hyperlink.**

Q. **Wouldn't you agree, sir, that you can tell that something is a hyperlink by the "syntactic" form of it?**

A. **By some part of the syntactic form, yes, you can.**

Q. **Right. And, in particular, what you can tell by looking at the syntactic form is if it has a left angle brace A space HREF equals, and then a string of characters. You can tell that is a hyperlink; right?**

A. **No, that is incorrect.**

Q. **Let's take at look at your deposition at 150, 12 through 18.**

"Question: And what in particular in the

syntactic form?

"Answer: Left angle brace, A, space, HREF, equals a string of characters that do not include a right angle brace, unless quoted, followed by a right angle brace. That is the syntactic definition of an HTML hyperlink.

"Question: Got it.

Were you asked that question and did you give that answer?

A. **I did. I'd like to explain that, too.**

Q. **No, I prefer to keep asking questions just so we make sure that we focus on the issues since I have limited time here.**

THE COURT: And, Mr. Davis, so you know, the other attorney will have a chance to ask you additional question, if she wishes.

THE WITNESS: I understand.

THE COURT: Go ahead.

BY MR. OUSSAYEF:

Q. **So here what we have by your definition is a hyperlink; true?**

A. **The definition that you just played for my deposition took place at a point where we were debating what the difference between links and hyperlinks were.**

Q. **Sir, I'm just asking if what we're seeing here meets your definition of a hyperlink.**

A. **It meets a definition I gave in my department. We were discussing what a hyperlink and link were.**

Q. **So it meets the definition of hyperlink that you gave in your deposition, and it doesn't have any state information in it, does it?**

A. **That is correct.**

Q. **Okay. So now just to be clear, this, what we're looking at here on the Elmo right now, this is from 1996 but you don't have any copies of templates from 1995; true?**

A. **That's correct.**

Q. **They're not on the CDs that you were looking at earlier; right?**

A. **That is correct.**

Q. **And there is no way to know for sure what any template files in 1995 look like; right?**

A. **Are you questioning my memory of these template files?**

Q. **I'm asking, you know, if you want to think back to the deposition that you had, there is no way to know for sure what any template files from 1995 look like; true?**

A. **I can't put a template file in front of you from 1995. You are asking me whether I know what a template files looked like. I know what template files looked like in 1995.**

Q. **In fact, you testified that there is no way to know**

for sure what any template files in 1995 look like; true?
A. In terms of presenting you with a copy of it, that is correct.
Q. Okay. And that is because they're missing; right?
A. That is correct.
Q. Okay. And you would agree with me that the 1995 templates embedded state information in almost all hyperlinks but not all hyperlinks; true, sir?
A. You, once again, are conflating or you are forcing me into this term "hyperlink" and asking me to make a generalized comment about the term "hyperlink" when I believe that hyperlink is a very specific term with a statement I made about that is accurate. But the way you have asked me that question, if I answer it the same way, it will be inaccurate. So either I get to distinguish between what I mean by hyperlink and what I mean by a link or I can't really answer that question fairly.
Q. So let me ask you an easier question. You testified at your deposition that the 1995 templates embedded state information in almost hyperlinks but not all hyperlinks; true?
A. I believe you're quoting from my testimony, so obviously yes.
MR. OUSSAYEF: I have no further questions.
THE COURT: Redirect.

MS. SHAMILOV: Thank you, Your Honor.

REDIRECT EXAMINATION

BY MS. SHAMILOV:

Q. **Mr. Davis, thank you. I only have a few more questions, if I can do this.**

Counsel asked you some questions about the slides that you were discussing and about the templates files on the left. Do you recall that?

A. **Yes, I do.**

Q. **And you walked through that template file in chunks. Do you recall that?**

A. **I do.**

Q. **And you built the website. Do you recall that?**

A. **Ies.**

Q. **And you mentioned file form-page-1.CPP. Do you recall that?**

A. **Yes, I do.**

Q. **And is that the file you asked to review but were not given a copy of?**

A. **Yes, it is.**

Q. **Let me show you on the Elmo, see if I can do this.**

What does it say on the very top?

A. **It has the full path to this file which ends in form-page-1.CPP.**

Q. **Is that the file you mentioned you wanted to review?**

A. **Yes, it is.**

Q. **Let's look at the very first chunk of this.**

Can you see that well enough?

A. **Yes, I can.**

Q. **Okay. Now, this chunk starts at the left, line 7. What does it say?**

A. **Line 7 has the H2, finalizing your order is easy.**

Q. **And there is highlighted there, I highlighted for each of you and the jury the three lines here: line 14 of this file, 24 through 25, and 27 through 29. Do you see that?**

A. **Yes, I do.**

Q. **Are these the lines of code that you have specifically talked about during your testimony when I was asking you questions?**

A. **Yes, they are.**

Q. **And let's look at line 24 and line 28 of this file that you wanted to review to be able to answer counsel's question.**

Is this the "why this is safe" link that you talked to the jury about when the user clicks on a credit card and wanted to know why it would be safe to use a credit card?

A. **Yes, it is.**

Q. **And what about this, "why this takes longer?" Is**

that the second link you were talking about to the jury?

A. **Yes, that is the link that I described here.**

Q. **And these two links have the dollar sign zero that you discussed earlier today; correct?**

A. **Yes, the placeholder is present in all of these links.**

Q. **Now --**

THE COURT: Hold on.

MS. SHAMILOV: I'm sorry.

THE COURT: Were you done answering the question?

A. **The placeholders are present in both links and in the forms statement as well.**

Q. **And these are the links that you said get substituted with session IDs; correct?**

A. **Yes, that's correct.**

Q. **Okay. So these are the exact two lines that you already discussed with respect to that slide earlier today?**

A. **Yes, they are.**

Q. **And, in fact, this chunk, is this an identical chunk from the file that you put up on the slide?**

A. **Yes it is.**

Q. **Now, was that depiction of the slide and the walk through that you did through a template file that does CPP page 1 file, is that accurate?**

A. **It's completely accurate.**

Q. **Okay. Counsel also asked you to talk a little bit about an image that you filled on Amazon.com and described here. Do you recall?**

A. **Yes, I do.**

Q. **I asked you during the direct if that was the exact web page at Amazon.com, didn't I?**

A. **Yes, I believe you did.**

Q. **What did you respond with?**

A. **I believe I indicated that wasn't actually a screenshot of or an exact pixel representation of the page that you would have seen in 1995 but was, you know, a fairly good rendering of what a user would have seen at that point in the ordering process.**

Q. **Counsel asked played a few deposition clips; right?**

A. **Yes.**

Q. **Okay. And I think it looked like to some of them, you wanted to explain what you meant in your deposition. Is that right?**

A. **That's correct.**

Q. **Let's do that. But before we do that, there was a question that counsel put in front of you. I don't have access to counsel's video, I'll have to do it on paper. I'm sorry about that. But this was the question right here on the bottom that counsel asked you: "And you don't know what**

changes happened to the Amazon source code in June of 1996, do you?"

And you responded with "that is correct" on line 2.

Do you see that?

A. **Yes, I do.**

Q. **And that is the clip that counsel played for you?**

A. **Yes, it is.**

Q. **Let's look at what you said in your next question and answer. This is what counsel had, and I believe you wanted to explain.**

The question was:

"Question: And you're saying it would be simple for you to determine whether the source code was the same in 1995 or 1996, but you didn't actually go through that process prior to talking to Dr. Weissman, did you?

"Answer: I did go through -- through that process."

"Question: When?

"Answer: Several years before, on two different occasions."

Do you see that?

A. **I do.**

Q. **That is your trying to explain to the jury and you were not given a chance to do?**

A. **Yes, it is.**

Q. **Now, you also mentioned there were some questions you were not able to answer at your deposition that you were able to answer today and you mentioned something about a trip to Wilmington and DuPont Hotel. Can you explain that a little bit more? What did you mean by that?**

A. **The clip of me in the deposition in which I said I had no idea, I couldn't provide a detailed accounting of where the source code came from took place in November of last year and it was an honest answer at that time. I wasn't certain precisely what the process was by which this source code had been generated.**

But having been down to Wilmington in connection with the trial, you know, coming back to a place jogs your memory and in remember being here in 2009, specifically being in the Hotel DuPont. I don't know if you local are but you know it's a fairly memorable hotel, and I remember the specific meeting that I had up in the lawyer Suite there with the lawyers there and with the Amazon software engineer and we did go through the process.

MR. OUSSAYEF: Objection. Hearsay, Your Honor.

THE COURT: Overruled.

THE WITNESS: We actually sat down with all of Amazon source code for a very extended period of time. He gave me access to the source code repository, and I actually

looked through it on my own. We talked how he pulled the files out of the repository, how he sort of collected them to together in these, in two separate folders.

All of these details are things that back in November 2017, I did not recall. And I wouldn't have recalled them really until, I don't know, perhaps a month ago when I first came back into Wilmington. Having been here, that, that process is a very clear memory to me now, which is why my answer to the question of I don't know where the source code came from or how it was produced is different now than it was in November of last year.

Q. Now, counsel also played a deposition clip that, where he asked you, you know, can you prove that the code from June of 1995 that is on the CDs in front of you actually ran the website? And I believe you said you cannot prove that in that deposition clip. Do you recall that?

A. I do.

Q. And in response to that clip, you wanted to explain what it is the context of that video. And can you please explain what you wanted to tell the jury?

A. I actually asked IBM's counsel, I wasn't certain what he meant by "proof" and during my deposition when he was asking me can I prove it, my assumption was that proof in this case meant I can bring up new evidence, maybe a file or some sort of, something other than my own account of what

took place.

I didn't feel at that point that I needed proof in the sense that he was asking me. However, I actually was the person, as I said multiple times. I wrote the code that ran the website. There were three of us running that company for the first several months of its existence. I know what files were. I know what was in the template files. I understand the entire statement. The entire statement of the system I already developed at the University of Washington and I did it at Amazon.

So I'm sitting here today telling you that the source code I reviewed as part of this case is the source code that ran on Amazon's web server at that time.

I also tried to explain to counsel during my deposition when this clip wasn't played really what I meant by this. For example, I think if you asked anyone to prove this particular piece of source code runs a particular website like, you know, Facebook or Google or anything else, and you say can you prove that this was the source code that actually runs this website, it would be very difficult to do that even for a website that is running right now with the source code right now.

A. So can I prove it in the sense that I got one file with some other piece of property, I don't have that, we didn't keep records like that. Can I prove it to you in the

sense that I was there and responsible for maintaining this file, writing the code, running the website, I was that person and I'm here before you today to say this is the source code that ran the website at that time.

Q. **Now, how sure are you that the template files were used in 1995?**

A. **I'm -- they were a fundamental part of the website in 1995.**

Q. **And the templates that were used in 1995, did you create them?**

A. **Yes, I did.**

Q. **And did they look in 1995 substantially similar to the template file copies we have from the 1996 collection?**

A. **They were substantially similar and in a few cases identical.**

Q. **And the code that we have from July of 1996 after you left, when you inspected that, did you recognize that code, parts of it at least?**

A. **There were very large parts of the code in June 1996 which is substantially similar or identical to the code in June 1995 case and also similar to the way I would have left things when I left in March of 1996. So although there were changes to the code before when I left in March and when these files were essentially snapshot, all of that code is stuff that I participated in writing and I recognize and**

understand.

Q. **Did that code on the June 1996 CD in front of you run the website of Amazon when you left in the spring of 1996?**

A. **What would have been running in the spring of 1996 would have been something fairly close to what we see on the June 1996 version. There may have been a number of changes that took place in those two or three months in between them, but you know, it's substantially and in particular in relation to the state management thing that I spoke about, it would have been the same.**

Q. **So the state management process that you described to us with respect to the checkout for example in July of 1995, were there changes to that particular process between July of 1995 source code and the June of 1996 source code that you reviewed?**

A. **Amazon had begun to experiment with cookies by that time, but the state management system that was in use still even in June of 1996 was still using the technique, the solution that I had described to you earlier.**

Q. **And your inspection of the source code confirmed that?**

A. **Yes, it does.**

Q. **You also wanted to explain the difference between hyperlink and link and it seemed like you were very adamant about the difference and you were not given an opportunity**

to do that. Can you please explain to the jury what you mean by hyperlink versus a link?

A. **So when Tim Berners-Lee invented the web, his initial thoughts about this involved simply a set of linked documents, there would be a document and another document that was closely related to it and you could click and see the other document. He quickly realized that you could rapidly extend this to documents on other computers, you click on this link and it brings you to a page somewhere else. And taking the technology before he started working this, that type of connection between two documents was already being referred to as a hyperlink.**

Now, in web development, people would differentiate between a hyperlink and link. I talked to you during my testimony about how there was what we would call a link which said skip to step five, but I also described to you how a user clicked on that link there was no HTTP request sent to any web server anywhere, and yet if you were sitting in front of that page talking to a colleague or a family member or a friend, you would say hey, click on that link. That is a fundamentally -- what happens when you do is that fundamentally different than when you click on a link that results in a request going back to a web server and you go to a web page, those would be called hyperlinks because they jump outside of the document and they go to a

web server running on another computer.

Similarly the messaging link that I described, when you click on that, there is no request sent to a web server, there is no web page that shows up. That's a link which when you click on tells the browser, can you pick something up from that. It's not a hyperlink. A hyperlink is when you click on it, it results in a request being sent to a different computer and that computer sends you back a response.

So in Amazon's website in 1995 and pretty much any modern website you will find a mixture of these things which people locally might call links, you might call hyperlinks, but it's very important functionality wise to differentiate between links and hyperlinks. Hyperlinks go off to another computer.

Amazon state management system, it was vital to us every time there was a link that came back to the server it had a session ID in it. Do we have a session ID to skip to stage five? We didn't. Did we need session IDs to start a management session, we didn't. All the hyperlinks that went back to our server and were part of that state management session had session ID. Yes, we had some links, not hyperlinks that would cause the web browser to do various things, we didn't need session ID for those.

I really wanted to explain the difference

between these two. And in fact in my deposition, the clip that you saw, I discussed this difference at some length with IBM's counsel.

MS. SHAMILOV: Thank you, Mr. Davis. I have no further questions, Your Honor. May I ask that the witness be excused at this time?

THE COURT: In just a moment he'll be excused. First I want to let the jury go for lunch. No talking about the case and we'll get you back here after lunch.

(Jury exited the courtroom at 12:30 p.m.)

THE COURT: All right. Any objections with excusing Mr. Davis?

MR. OUSSAYEF: No, Your Honor.

THE COURT: You may step down and you are excused. And we will take a lunch break.

(Witness excused. A luncheon recess was taken.)

THE COURT: Anything before I bring the jury in?

MR. OUSSAYEF: Yes, Your Honor. We haven't gotten the latest deck that I think Groupon intends to present. It may have been uploaded, but we haven't been able to download it yet to see it, so we can object live, perhaps, but there is at least one issue where we know there is a problem.

THE COURT: Is this for the next witness?

MR. OUSSAYEF: I don't know.

MR. HADDEN: Yes, Your Honor, we're going to read some uncontested facts but then we go to the next witness.

THE COURT: What is the status of the slides?

MR. OUSSAYEF: Do you have it on like a physical media that we could see, maybe?

THE COURT: A couple of you who are looking at this, step out into the hallway maybe. How much stuff do you have to read.

MR. HADDEN: Not much, but I think we need to at least get started.

THE COURT: We'll get started with the jury. If need be you'll just have to object as it comes up.

MR. OUSSAYEF: There is one set of slides that I can bring up right now.

THE COURT: All right. Mr. Hadden, are you going to be arguing?

MR. HADDEN: I will be presenting the witness, so I can argue this, too, I guess. I don't know what the issue is.

MR. OUSSAYEF: I think it might be a mistake. It's just something that came up. You can play this here. It's just this claim element here, the objection was sustained based on it not being in the expert report. I'm not sure if this was inadvertent with having this claim element presented again.

MR. HADDEN: I think the agreement was we would not talk about predetermined aspect, we did not --

THE COURT: So there were a lot of objections we talked about this morning. I definitely recall you saying your view was this element was not discussed or adequately disclosed. It is unclear to me what Groupon's position is on that. I guess Mr. Hadden, you ought to come back. Is it your contention that the witness has disclosed an opinion on non-infringement based on this?

MR. HADDEN: Yes, Your Honor, in particular, he did focus on the predetermined aspect, he explained that this comes back to the '849 issue generally, this step requires storing information using a computer, that's not done by Groupon, it's done by a browser caching or not caching.

THE COURT: His opinion is that Groupon does not do that?

MR. HADDEN: Correct.

THE COURT: Because the user does it.

MR. HADDEN: Correct.

THE COURT: Okay.

MR. HADDEN: And that's in his report. I can give you the page number.

MR. OUSSAYEF: For that element in particular, I don't see it as being in the report at all.

THE COURT: I'm sorry?

MR. OUSSAYEF: I don't see claim 8, this last element being in the report at all.

THE COURT: Okay. Well, we'll find out where it is.

MR. HADDEN: It's paragraph 172, further, even if Groupon performed a characterization of respective reception system users, blah, blah, the alleged storing, i.e., caching of advertising objects or advertising objects identifications is based on this characterization. For example, Dr. Schmidt does not support the theory that the characterization would enable/disable caching nor is involved in setting the lifetime of cached HTTP response. That's what he's talking about.

MR. OUSSAYEF: I can address that right here, Your Honor. So that section if we look what claim that it relates to claims 13 and 16 of the '849 patent which requires storing.

THE COURT: Claims 3 and 16; right?

MR. OUSSAYEF: Sorry, yes, 3 and 16.

THE COURT: Is there a separate area where it talks about claim 8?

MR. OUSSAYEF: This whole section, this header where the highlighted portion is shown is not mentioned in claim 8 at all.

MR. HADDEN: Your Honor, so it refers back to common elements. Paragraph 184, he says Dr. Schmidt concedes that caching can be disabled on nonmobile devices, Schmidt 99, the alleged caching or storage limitations applies to asserted claims 1, 2, 3, 8, 9, et cetera.

MR. OUSSAYEF: So if the argument is specific to disabling caching, that's fine. I did not understand that argument to be about disabling caching. If the only thing he's going to talk about is disabling caching, what is disclosed in paragraph 184, then that's fine. But that doesn't apply to the specific element identified, but I don't have a problem with mentioning that.

THE COURT: Is he talking only about disabling caching, Mr. Hadden?

MR. HADDEN: He's going to explain that Groupon does not control the storing which is required and the caching did not meet that requirement.

THE COURT: And is he linking that to that element that we saw highlighted with the slide?

MR. HADDEN: Yes.

THE WITNESS: Your Honor, that is the storing element of claim 8.

THE COURT: You do or you do not object to that?

MR. OUSSAYEF: If it's going to be limited to what's in the report here about disabling caching for that

element of claim 8, then that's fine, Your Honor. As long as it's not talking about predetermined or any other part of the claim that's not discussed here, that's fine.

THE COURT: Well, if you think he's going beyond that, then you'll object at the time. But based on what I have heard, I'm overruling the objection as made and we'll charge all this time to IBM.

Anything further before I bring the jury in?

MR. OUSSAYEF: No, Your Honor.

THE COURT: Let's bring the jury in.

(Jury entering the courtroom at 1:21 p.m.)

THE COURT: Ladies and gentlemen, we are ready to move on.

What is next from Groupon?

MR. HAACK: Your Honor, we would like to read some of the undisputed facts in the pretrial order into the record.

THE COURT: You may do so.

MR. HAACK: Ladies and gentlemen, you saw IBM read undisputed facts into the record earlier this week. We're just adding some more for Groupon.

First, the '967 patent expired on August 18, 2015.

Number 13. The '601 patent expired on June 7, 2016.

Number 24. U.S. Patent Number 4,575,579, entitled Identifying Arrangement For Videotex System with Public Terminals, issued to Gerhard J. Simon and Gerhard Schneider from a patent application filed on November 29, 1983.

Number 25. U.S. Patent Number 6,016,484, System, Method and Article of Manufacture For Network Electronic Payment Instrument and Certification of Payment and Credit Collection Utilizing a Payment, issued to Humphrey Williams, et al., from a patent application filed on April 26, 1996.

Number 26. U.S. Patent Number 7,680,819, Managing Digital Identity Information, issued to Joseph Andrew Mellmer, et al, from a patent application filed on September 27, 2000.

And finally, number 27. U.S. Patent Number 7,137,006, Method and System For Single Sign on User Access to Multiple Web Servers, issued to Michael L. Grandcolas from a patent application filed on September 22, 2000.

Your Honor if I may, I would like to offer this exhibit into evidence.

THE COURT: Does it have a number?

MR. HAACK: Defendant Exhibit 0672.

THE COURT: Any objection?

MR. OUSSAYEF: No objection, Your Honor.

THE COURT: It's admitted.

(Defendant's Exhibit No. 0672 was admitted.)

MR. HAACK: Thank you, Your Honor.

MR. HADDEN: Groupon calls its next witness, Dr. John Weissman who is an expert in distributed software systems and the Worldwide Web.

THE COURT: Thank you.

... DR. JOHN WEISSMAN, having been duly sworn was examined and testified as follows ...

THE COURT: Good afternoon, Mr. Weissman. Welcome.

THE WITNESS: Thank you.

MR. HADDEN: May I approach, Your Honor?

THE COURT: You may.

MR. HADDEN: Thank you.

DIRECT EXAMINATION

BY MR. HADDEN:

Q. **Good afternoon, Dr. Weissman.**

A. **Good afternoon.**

Q. **Could you introduce yourself to the jury?**

A. **Yes, I did. My name is John Weissman. I'm a professor of computer science at the University of Minnesota.**

Q. **And do you have a specialty in computer science, Dr. Weissman?**

A. **Yeah. My specific area of expertise is distributed software systems, so I build software systems that run across networks like the internet, those software systems involve web protocols and the systems include mobile devices, and cloud computers.**

Q. **Can you describe your educational background to the jury?**

A. **Sure. So I received a bachelor in distributed mathematics and computer science in Carnegie Mellon University in 1984. Then I worked in the industry for fourteen years. Then I received a masters degree in computer science from the University of Virginia in 1989. And I also obtained a few years of industry experience. Then I went and received my Ph.D. from the University of Virginia in 1995.**

Q. **And have you published any papers in the field of distributed software system?**

A. **Yes. So one of the parts of my job is to publish. And I publish in only highly reviewed peer reviewed composition journal. I have published over a hundred articles in journals, typically in the top tier societies in my field which is CM and IEEE. And I have also authored a number of book chapters as well.**

Q. **Have you won awards for your academic achievements?**

A. **I have won several awards, I have won several best**

paper awards. These are papers that are the best published at a particular conference which is already taking 20 percent of its paper. I have also received a teaching award. I received the Early Career Investigator from the National Science Foundation. I am also a senior member of IEEE, the computer society which represents a certain distinguished reviewers in the field. And I have also been a visiting fellow at the University of Edinburgh in the United Kingdom.

MR. HADDEN: I offer Dr. Weissman as an expert in distributed software systems and the Worldwide Web.

MR. DESMARAIS: No objection.

THE COURT: So recognized.

MR. HADDEN: Thank you.

BY MR. HADDEN:

Q. **Dr. Weissman, what were you asked to do in this case?**

A. **I was asked two things. First I was asked to evaluate in response to IBM's allegations that the four patents-in-suit that we have heard about, '967, '489, '601 and '846 were infringed by Groupon products.**

Q. **Were you asked to analyze anything else in this case?**

A. **Yes. I was also asked to evaluate the validity of those same four patents in light of the prior arts.**

Q. **And what materials did you consider in reaching your opinions?**

A. **The materials I considered are first of all the patents, and that would include the specification of the patents, they describe what they are, the claims of the patents, the Court's claim constructions which help give guidance as to the meaning of the terms and claims, the file history which is the back and forth between in this case IBM and the patent office prior to the patent getting awarded. I also reviewed deposition testimony from the inventors of the patents.**

Then I looked at Groupon, accused Groupon products. I looked at Groupon source code, Groupon documents. I also ran and installed Groupon products on my own to test how they're used. Also Groupon documentation.

In addition, I looked at the deposition testimony of Groupon technical representatives that you have heard about. And additionally, I looked at the report of, opening report of Dr. Schmidt which makes the case of infringement against Groupon.

Q. **And did you look at any third-party source code?**

A. **In addition as part of my validity analysis I looked at source code for the Amazon system that we heard about, and also in the materials considered for Groupon, I also looked at Groupon source code.**

Q. **Did you look at any prior art patents?**

A. **Yes, I did.**

Q. **And prior art publications?**

A. **I also looked at prior art publications.**

Q. **And how about prior art systems?**

A. **I looked at a number of prior art systems that we have heard about today.**

Q. **Did you look at files in the PTAB relating to patents in case?**

MR. DESMARAIS: Objection, Your Honor.

THE WITNESS: Yes I did.

THE COURT: Sustained.

Q. **Have you also been here throughout the trial, Dr. Schmidt -- I knew I was going to do that once -- Dr. Weissman?**

A. **I have.**

Q. **And you heard Dr. Schmidt testifying?**

A. **I have.**

Q. **Did you hear the inventors who are here testifying?**

A. **Yes, I did.**

Q. **Did you hear Groupon's technical witness testifying?**

A. **Yes, I did.**

MR. HADDEN: I would like to move into evidence the materials that he cited. Should I read off the exhibit numbers Your Honor?

THE COURT: You'll now read off the exhibit numbers?

MR. HADDEN: Yes.

MR. DESMARAIS: I don't have that in front of me, Your Honor, so it would be hard for me to follow.

MR. HADDEN: In the binder. I can give you a list if you want. PX 1 through 8 of the patents and file histories. Any objection?

MR. DESMARAIS: That's PX 1 through 4?

THE COURT: 8.

MR. HADDEN: No, 8.

MR. DESMARAIS: Those are the certified files. No objection.

THE COURT: Those are admitted.

MR. HADDEN: And then documents and testimony, that would be DX-202, DX-375, DX-376, DX-387, DX-391, DX-392, DX-397, DX-399, DX-482, DX-648, DX-649, PX-49, PX-106, I'm sorry, PX-49, PX-106, PX-963, PX-964, PX-966, PX-967, PX-969 through 970, and PX-1544 to PX-1555.

THE COURT: Any objection?

MR. DESMARAIS: I think we need to hold our response on that, Your Honor, because we don't have that in front of us. We can approach at the side-bar if you want to discuss it.

THE COURT: It's different than what was in the binder or what was disclosed here maybe?

MR. DESMARAIS: Yes. If you want to talk about

it at side-bar, we can, Your Honor.

THE COURT: We will have a side-bar, ladies and gentlemen. Please feel free to stand up and move around.

(Sidebar conference held.)

THE COURT: All right. So you are not sure that this is what was disclosed?

MR. DESMARAIS: Right. I just need to check. It was a long list. We don't have a slide that has the --

THE COURT: Right, because you weren't allowed.

MR. DESMARAIS: Yes.

THE COURT: You objected.

MR. DESMARAIS: So if we can do it? If we can check those numbers at the break, then I will have no objection.

MR. HADDEN: That's fine.

MR. DESMARAIS: But we did get exhibits that were objectionable. I don't know if they're on the list or not. We need to check. I just need somebody to check is all.

THE COURT: Right. Okay. Someone will check, but, you know, if he is going to use them, he is going to use them.

MR. DESMARAIS: If he is using it, then I will know as I see it; right? So it won't be an issue.

THE COURT: And you made a reference to the

PTAB. You are not planning to talk about the PTAB?

MR. HADDEN: No, no.

THE COURT: Okay. Is there anything else?

MR. DESMARAIS: The strange thing about this, we objected twice to the PTAB.

THE COURT: I don't know why he did it. It was a stray reference. You are not going there?

MR. HADDEN: No, it was just on the slide I was reading.

THE COURT: All right.

(Sidebar conference ends.)

BY MR. HADDEN:

Q. **Hello again, Dr. Weissman.**

THE COURT: Let me say for the record I'm not ruling on the admissibility of those exhibits right now, but you may proceed.

MR. HADDEN: Okay. Thank you, Your Honor.

I'd like to move in the publicly available documents that Dr. Weissman also reviewed. These are DX-36 to DX-54, DX-58, DX-146, DX-157, DX-160, DX-167, DX-338 to DX-374, DX-377 to DX-386, DX-388 to DX-390, DX-394 to DX-396, DX-442, DX-452, DX-525 to 527, DX-643, DX-645, DX-646, DX-655, DX-658, and DX-665.

MR. DESMARAIS: We'd like to handle this the same way.

THE COURT: We'll handle them the same way, so there is no ruling just yet.

BY MR. HADDEN:

Q. **What were the conclusions you reached in your analysis regarding infringement of this case, Dr. Weissman?**

A. **My conclusion is that IBM has not met its burden of proof on proving infringement of Groupon against the four patents-in-suit.**

Q. **Okay. And what was your conclusion regarding validity of the patents-in-suit?**

A. **My conclusion is that the patents are invalid under the prior art. And I will talk today about two of the patents as a clear example of that.**

Q. **And the two are the '601 and '346; is that correct, Doctor?**

A. **That's correct.**

Q. **Thank you, Dr. Weissman. So let's start with the '967 and '849 patents which we have been referring to as the Prodigy patents.**

Can you tell the jury what the field of technology that those patents related to?

A. **Sure. So the Prodigy patents flow out of this technology called videotex which we see depicted over here. And videotex was early days of online services, grew out of the consumer industry, and the goal was to provide simple**

services to users on terminals, things like stock quotes, weather, maybe very early games.

And the essential technology of videotex was screen based. So you had a single central server typically that owned the content and often controlled the content. It would deliver a screen of information at a time to the user screen, almost like watching a slide show or watching television.

And one of the key aspects of videotex system is that the videotex central server was in control. The user sat and viewed the material that was shown, had limited interaction, but, you know, essentially got a screen full of information at a time.

Q. **How does Prodigy relate to videotex?**

A. **So Prodigy grew out of that same videotex technology, and Prodigy is essentially videotex technology relying on a central server. In this case, it's a server that IBM controls with a database of information that IBM would deliver to client computers. And so Prodigy is still based on videotex technology.**

Q. **Is Prodigy also a screen based system?**

A. **Prodigy is also a screen based system. So Prodigy still controlled the user's screen.**

Q. **So in what respect did Prodigy differ from the prior traditional videotex?**

A. **Yes. So, you know, one of the problems of videotex was as I mentioned, this online dial up connection so the network was very slow. And, furthermore, because you had a single server, single central host delivering all the content screen by screen, this often meant things were quite slow for the many users that were connected to the system. And so the purpose of Prodigy was to try to speed up that performance.**

And another goal was to make information have greater clarity to the user. So the key idea of Prodigy was to divide the screen into a number of areas and also divide the information that the user was going to receive into smaller bits of information that would fit into those areas. The idea being that as we see it depicted here, that we can retrieve smaller pieces of information as needed across the network and so provide what we hopefully would be faster, more efficient performance for the user.

And as we're seeing here, the screen was decomposed into four partitions and those were filled with applications: a header at the top, politics, an advertisement in the third partition that says cruise scan has the guaranteed lowest prices, and a command screen at the bottom.

Q. **How was Prodigy able to control what was on the user's screen?**

A. **Prodigy controlled on the user's screen because it was a closed system. So Prodigy was run by IBM. IBM had a central database. IBM delivered the information that was requested by the user at the terminal. So IBM controlled that information. IBM, because it knew about the screen, could size that information appropriately so it could fit into those partitions. So IBM was in charge of what the user saw, the screens of information.**

Q. **And what does Prodigy have to do with the World Wide Web?**

A. **Prodigy has very little to do with the World Wide Web.**

Q. **Why do you say that, Dr. Weissman?**

A. **Well, as I just described, videotex and Prodigy are screen based technologies. Okay? Admittedly, Prodigy did make an adjustment to videotex by breaking up the screen, but it was essentially still screen based.**

The web differs in a number of important ways, so much so I would argue it is a revolution compared to what Prodigy was based on.

No. 1, Prodigy grew out of this sort of online services dialup very early pre-web kinds of applications and services whereas the web was developed by computer scientists, people like Tim Berners-Lee and high technologists that were motivated by the many innovations

that were happening in the computer science field. We'll talk more about those things like caching, breaking up content into objects, that sort of thing.

So in fact if you look at the early web, if you look at the first couple of years, what you will notice are the web pages that you see are mostly computer science departments or national laboratories. So it grew out of a completely different community.

The second point I'd like to make is the web is not screen based but document based.

Q. **What does that mean, "document based," Dr. Weissman?**

A. **This is sort of the fundamental core aspect of the web. The web is designed to be an open system with millions of servers providing documents in which those documents could be interlinked. And the goal of the web is to provide not a closed system but a growing and expanding system, so we could have more web servers, more content, have more interlinking of that content.**

So it sounds like a pretty big job, but what is brilliant about the web is what the web provided was a few simple pieces in order to make that happen.

Q. **What were those pieces, Dr. Weissman?**

A. **So as shown here, we heard a lot this past week. One piece was the Hypertext Transfer Protocol which is a way for a user at a browser to request a page of information. So**

this is simply the protocol by which I can ask for something and then get something delivered back to me, that content of that web page.

The second piece was HTML, Hypertext Markup Language which is a language that allows authors of content to describe their web pages and then hopefully make them available on the web servers.

So the web really for these two simple pieces of protocol, as long as everybody followed it, people could add content at will and grow documents and enable those documents to interconnect with each other.

A final piece I'll mention very briefly is the use of something called URLs, which is a way that the user can name or refer to a web document as it were.

Q. Now, both HTML and HTTP started out with the words hypertext. What is hypertext?

A. Well, hypertext refers to this kind of core idea that a document contains reference to other documents. That's the hyper. And I think most of us would agree that that is probably the most compelling aspect of the web is you don't get a document in isolation.

You know, in videotex, you've got a screen that was sort of isolated from anything else. It was you were playing a game or looking at stock quotes.

The web, you get a document through a window as

you are looking via these hyperlinks. By simply clicking, I can go somewhere else and somewhere else.

Q. **Can you have a hypertext in a screen-based system?**

A. **Well, so, you know, web pages are what are delivered to a browser; right? So the web only cares about the delivery of documents to web browsers. The web isn't concerned about screens and where things fall on a screen. That is up to a browser and up to a user to decide based on what they do, where things show up on a screen.**

Q. **And why is it important to the web that it provides documents and not screens?**

A. **Yes. So remember in the videotex system, it was really slow. Part of the reason it was really slow is this server was having to build the entire screen. There was a lot of data in a screen of information. And so the servers were bogged down and they were fairly slow because they had to build an entire screenful of information at a time.**

The web, in contrast, that would completely bog the web down. Imagine a popular website like CNN or Amazon.com. If it had to spend its time drawing on everybody's screen, it wouldn't be useable. So the web is actually pretty lightweight. Servers just deliver documents, and the browsers and the users figure out essentially where those things show up on the user's screen.

Q. **This shows here our illustration of the web. Would**

this sort of interlinking of information be possible on a screen-based system?

A. **Not at all. Because once you got information on your screen, it wasn't connected to anything other than what was already located at the user's terminal or at a Prodigy server. There was no way to reference anything else because there was nothing else. It was a closed system.**

Q. **So does the fact that the web is a web depend on the fact that it's based on documents, not screens?**

A. **Correct, based on documents which can come from anywhere, and any document can refer to any other document as long as the document knows the address or name of that other document.**

Q. **Now, we've heard some discussion in this case of caching. Can you explain what caching is, Dr. Weissman?**

A. **So caching is an odd idea in computer science. There is caching at many different levels of computer systems. Caching is particularly useful in a distributed system because it's expensive in time to go across a network to get information.**

So the idea behind caching, and it was described in this paper, the seminal paper by Doug Terry, was that mid requests for information across networks generally, once you get that information, you store it locally so that if the user makes another request and wants to look at that

information again, it's available on the local machine and I can avoid going across the network and waiting for it to come again.

Q. Now, we just looked at the diagram from the Terry paper you just mentioned. Can you just explain what it is showing here?

A. Yes. So at the top, the first box says cache lookup. So here --

Q. Could I stop you just there? When it say cache lookup, what is the cache that it's really talking about?

A. Right. So the cache in this case would be a place to store things. So this would be storage local to the computer that the user is using.

Q. Okay. Thank you, Dr. Weissman. Go ahead.

A. Okay. So the user requests some piece of data. And the first thing we go in a cache based system is we look and see is it in the cache? Have I retrieved it before? And if it is in the cache, that is wonderful. That is a decision point I check, is it in the cache? And if it is, I try to use the data. I get it very quickly because it is local.

If it is not in the cache and that is the "no" branch on the right, I have what is called: query the server. I have to go out to a server across the network and spend a lot more time to get the data.

Q. What happens if it is in the cache? What does Terry

say you do next?

A. **Well, if it is in the cache, you try to use that data. You might take an initial step to decide is the data valid? When you retrieve information and store it in a cache, if that information were to change at the server, then it's a possibility that the data can come out of that cache. If you retrieve something on Tuesday, say Tuesday's weather and now it's Wednesday, well, Tuesday's weather is no longer valid. You have to go back to the server to get Wednesday's weather. So this is just asking, you know, can we determine whether the data is valid? And if it is not, then we are going to have to query the server to get the data again.**

Q. **So did Mr. Filepp invent the idea of caching information locally?**

A. **He did not. Nor this possibility of having to get the data again because it was out of date.**

Q. **So the idea of using local information and if it is not up-to-date or there, going and asking this server, is that something that was well known before Prodigy?**

A. **That is as old in the hills as distribute systems even as long as I have been working on them and even before.**

Q. **And what are we showing here, Dr. Weissman?**

A. **So here we are showing another seminal paper on a system called Andrew, a Distributed Personal Computing**

Environment.

And I was fortunate enough to be an undergraduate at Carnegie Mellon just down the road in Pittsburgh when this was being developed. And Andrew is a distributed personal computing environment.

What Andrew was a collection of was called virtual workstations, so now we're getting into an era where we had more than dumb terminals available to us. We had actually powerful machines, PCs, for example, or sometimes called workstations in that era.

So Andrew was a distributed work system that employed the use of more powerful machines together in a network, and these workstations could retrieve data across this network to a file system, but these workstations had a lot of capability. They could do computation, they could store data, because this was a much more powerful system.

Q. **These workstations are not the dumb terminals that we saw in IBM's slide?**

A. **They are not. These are full fledged computers.**

Q. **And this is March 1986; is that right, Dr. Weissman?**

A. **That is when the paper was published. The system was in development in the 1980s, early 1980s.**

Q. **Did the Andrew system also cache information locally at those workstations?**

A. **Yeah. That was a core aspect of Andrew. Whenever**

a user tried to open a file, Andrew would fetch the entire file across the network and store it locally in the belief the user would want to keep accessing or access all parts of that file.

Q. **Is that why it is described here where it says Venus checked the cache for the presence of a valid copy?**

A. **It is. So Venus is software are running at the workstation. So Venus would check the timestamp when the data was retrieved. It would ask the server has the data changed? Has somebody updated the file?**

And if it has not, if the user has the most up-to-date version, wonderful, then we'll open the local file and avoid having to go to the server to get the file.

Q. **And so Andrew also would look at the local information, use the computer first and only go to the server if needed?**

A. **Right. If the server told the Venus client, oh, yeah, I have a new version on the database on what you have and the server knew that, Venus would say I have Tuesday's file. The server would say, oh, there is a Wednesday version. In that case, then the Venus software would invalidate the local copy and then have to fetch a new copy from the server.**

Q. **So let's go back now and talk a little bit more about the '967 patent?**

What is shown in Figure 3a?

A. **So Figure 3a is showing how in this patent the screen is decomposed with a number of partitions or areas of the screen, each holding different things.**

Q. **And are the screen partitions the same as the information that is shown in this partition?**

A. **No, the partitions are, as you can see, an area of the screen. And then those partitions would be filled with information.**

Q. **And --**

A. **So --**

Q. **All right. If I look here on the slide I put up. And I'm sorry for the spin. Can you explain what that quote is from the patent?**

A. **Yes. So the screens are broken down into these partitions which are, as the patent describes, addressable partitions, meaning they have a location. So you could address a position at a partition. It has a coordinate. Think of it as a two-dimensional coordinate.**

Q. **And what is buying shown here?**

A. **What is being shown here are that partitions can contain different types of information. They have a header partition, you can have a body partition, window partitions, ad partitions for advertising, and even a partition that contains commands shown at the bottom.**

Q. **And how in the Prodigy patent are these screens partitions constructed?**

A. **Yes. So the patent describes in fact that partitions are created from units of data called objects and, in fact, objects are also the units of data that would fill the partitions. But the units of data that create the screen areas in the partitions are described as page format objects. And that is depicted over here on the screen.**

And so as it says here, the page format object defines the screen partition, locations and size.

Q. **So if we relate Figure 3a to 502, what would the page format object tell us about how to lay out the screen in 3a?**

A. **Well, you would have in this particular screen a number of different page format objects that correspond to the different areas of the screen. So you would have the page format object for the header partition, for the body partition, the ad partition, so on and so forth. And you can tell the system where essentially to create that partition based on the information such as location and size.**

Q. **Now let's look at the claims. Before we get there, did you apply the Court's claim constructions in your analysis to the patents in this case?**

A. **Yes, I followed the Court's claim constructions.**

Q. **If we look at claim 1, it's got a lot of words. You**

have highlighted a couple of the steps in red. Why is that?

A. **What I would like to talk about are the method steps that are highlighted in steps B and C.**

Q. **And now for IBM to prove, meet its burden of proof of showing that Groupon infringes its claim, what did IBM have to show?**

A. **IBM to meet its burden of proof for infringement would have to show that Groupon performs all of the elements of this claim A, B and C. So it is language that Groupon doesn't perform steps B and C, so therefore it does not infringe claim 1.**

Q. **So if the jury is convinced that Groupon does not perform one of these steps, can IBM meet its burden of proving infringement?**

A. **You cannot. If I can show that Groupon does not perform B or C or B and C, there is no infringement.**

Q. **You have highlighted B and C in red. Do you agree with Dr. Schmidt's analysis of the other elements at claim A?**

A. **I do not. I want to focus on B and C.**

Q. **Now, if we start with the two key requirements here, we have the Court's construction. So if we start with B, it requires a first area for presenting applications. Is that right?**

A. **That's correct.**

Q. **And what is your -- what did Dr. Schmidt identify as the first area of presenting applications?**

A. **Well, as Dr. Schmidt talked about -- he presented by showing an image of a Groupon web page on a screen, and he drew a red box around the entire web page, and referred to that first area as the entire application, the application first area was the entire screen.**

Q. **So did Dr. Schmidt say that the applications in the first area were the same thing?**

A. **Yes, he did.**

Q. **Does that make sense given the language of the claim?**

A. **It does not.**

Q. **Why not?**

A. **Well, the claim requires that you have first area for presenting applications, as well as second area for presenting a plurality of command functions. Secondarily, it must be the case that the partition is generated and then the application is placed in that partition. Applications as we'll see do not generate areas for presenting themselves.**

Q. **So what do we see here?**

A. **So what we see here is what we might think of as what it means to partition a screen. I'm showing the overhead screen and we have drawn a red box at the top and a red box below. And so this is what one would think of as partition**

or screen area.

Q. **Does Groupon generate those red lines?**

A. **Groupon does not generate those red lines. All Groupon does is deliver a web page, and the red lines were superimposed on top of that web page.**

Q. **Does Groupon require that or control where any of the information in the web page is shown on the screen?**

A. **No, so Groupon adjust the web page to the browser. What we're illustrating here is by moving the browser window, by zooming in, by scrolling, what I am clearly showing is that application content can be detected on different areas of the screen.**

Q. **And when I or when you show the zooming or scrolling, is Groupon doing any of that?**

A. **Groupon does not. Groupon just delivers like any website web page, it is the browser and the user that is deciding what content they want to see. So the user decides how this information is essentially mapped to the screen with the browser, so I move the browser around, I can resize, I can scroll. Groupon's web page has no idea where it's going to end up on this screen.**

Q. **Is that division of labor between a web server providing a web page and what the browser does to look at parts of it important in the web?**

A. **Those are essential. As you can imagine, web servers**

or Groupon or others are quite busy just serving documents. They can't spend their time figuring out what everybody's screen likes and how to basically decompose all that content so it fits snuggly into their screen rather than deliver the documents, and it is up to the user and the browser to figure out how they want to -- what parts of the screen should that be viewed in.

Q. **Here I think we're showing the same effect in a computer screen. So, again, is Groupon controlling any of the changes I make to how this looks in the screen?**

A. **No, Groupon delivers the entirety of the web page and it is up to the user in concert with the browser to figure out how that information is placed on the screen. The user is in complete control. This is very much very different than what we saw in Videotex.**

Q. **If a user changes the view of their browser so that the entire web page is shown like this, is Groupon generating an area in which that web page is displayed?**

A. **It is not.**

Q. **And the same here, if the user has their browser set so that a portion of the web page is displayed like this, is Groupon determining an area of the screen for displaying the area of the web page?**

A. **No, it is not. Groupon is just delivering the web page and Groupon's job is done. It is up to the browser, it**

is up to the user based on what they want, it is based on the browser window, where it is, as to how things get put on the screen. Remember, the claims were talking about screen areas.

Q. **In fact, does Groupon even know if the user looks at the web page like this or like this?**

A. **Groupon has no idea what the user, how they're viewing the content.**

Q. **If we look now at Dr. Schmidt's analysis of this element, what does Dr. Schmidt say Groupon does to perform the generating at least a first partition or as the Court has construed it, at least a first area for presenting applications?**

A. **So, Dr. Schmidt is showing two things. So the left he's showing the human language which is what we see on the screen. And on the right he's pointing to the computer language where the HTML is associated with what we're seeing on the screen.**

Q. **Can I just stop you there. In this slide where Dr. Schmidt is talking about computer language, is that actually the web page he's pointing to?**

A. **Yes, he is.**

Q. **So that's the HTML, or at least a portion of this HTML document that Groupon would send to the browser?**

A. **On the right is an example of an HTML or a web**

document that Groupon would send to a browser. And so web pages being sent, and so of course it doesn't make sense for a web page to define where it shows up on the screen for reasons we described. But what is being pointed to in the web page are a number of div containers, a number of div tags, for example, global container as providing evidence of generating a partition for presenting applications. A div tag has really nothing to do with the area of the screen. Div tags don't specify location or anything related to area. At best a div tag would be associated with how to format content within that web page.

Q. **And this HTML that he points to here including the div tag, is that part of what he's already said is the application?**

A. **Yes, he is.**

Q. **So does that make sense, that what generates the area for the application be displayed is the application itself?**

A. **No, it doesn't make sense to say that the application is generating its own area. If you remember, read the claim language of generating a partition for presenting applications, we have partition generated and then how to choose applications, you don't have an application and say it's generating its own area of on the screen, it doesn't happen.**

Q. **Is the fact that this particular div tag, global**

container by Groupon, does that have any significance as to what it does?

A. **That's just a name that any -- that you can get the div tag, you can give it the name Fred or John or anything else, it's a just a name so you can refer to it. Unless you refer to it in something called a style sheet or some styling directive it will have no effect at all. So the name in quotes means nothing.**

Q. **Has Dr. Schmidt ever identified any style sheet or code that refers to the global container div tag?**

A. **No, he has not.**

Q. **Just to help the jury understand what div tags are, what are you showing here, Dr. Weissman?**

A. **So on the left I'm showing what we're referring to, the computer language, this is what you would see on a browser. And corresponding to that is the HTML or web page shown on the right which would be a server that would be requested by the user at the browser on the left and rendered or shown on the screen. What we're showing is what the user would see when that HTML document is retrieved.**

Q. **So just to be clear, this thing on the right is just a very simple web page, it could be sent to a browser by web server; correct?**

A. **Exactly.**

Q. **This is what it would like if you had it on your**

screen at that website?

A. **Just a very simple Hello World is all you see.**

Q. **Here we're adding a div tag; is that right, Dr. Weissman?**

A. **Yes, we are surrounding that text with a so-called div tag. You can give a div tag a name. You can give it any name you want. Suppose we do that, we change the web document on the right, and then we have a browser retrieve it. Notice there is no effect at all. There is no change to what you see. There is no partitions, there is no changes whatsoever. And the reason is that this particular div tag is not referenced anywhere else, so it doesn't do anything.**

Q. **So what if we add a reference to it?**

A. **So here is an example of what you can do with a div tag is you could say div tag, hello, I'm going to associate some style reference. Any time I see a div tag called hello, anything within that tag is styled by the information shown up above.**

So what this effectively says is when you see a div tag below, anything inside that tag is call it red, has a bold font and is underlined. You see now a difference in the format. What you still don't see is a screen area, you see a styling and the changing of the look of the content.

Q. **So if you add a reference to the div tag, you can**

change something about how it's presented, but div tags being part of the HTML don't affect the screen area?

A. **It doesn't affect where you see something on a screen. Again, that's subject to what the user is doing with the browser. You can change the formatting, the fonts, the colors.**

Q. **Dr. Schmidt hasn't shown even anything like this that would use the global container div tag to change how a web page is presented, has he?**

A. **I'm not aware.**

Q. **If we go back to Dr. Schmidt's analysis, has Dr. Schmidt shown that Groupon generates at least a first partition for presenting applications?**

A. **No, he has not.**

Q. **So, at this point, can IBM meet its burden of proving infringement?**

A. **Since he has not shown that Groupon's websites perform this method step, we can say even at this point that IBM has not met its burden of proof of infringement of claim 1.**

Q. **Let's look at the next element you have highlighted. Can you read what this is?**

A. **Yes. So the step C says generating concurrently with the first partition at least a second partition for presenting a plurality of command functions.**

Q. **Is this the Court's claim construction, the second partition over here?**

A. **Yes, it is.**

Q. **What does that require?**

A. **It requires two things, it requires a second area on the screen, and it requires that that second area then enable a presentation for a plurality of command functions.**

Q. **If we look back at the patent, is there an example of this second area in the patent?**

A. **Yes, highlighted at the bottom of 3A, the patent gives examples of commands and you can see them next, back, path, menu, these are commands that cause one to move around different screens of information.**

Q. **What has Dr. Schmidt identified as meeting this requirement?**

A. **Dr. Schmidt is pointing again to the same web page, but he's pointing to a div tag within that same web page that contains a number of -- we'll talk about in a moment -- hyperlinks. What Dr. Schmidt is saying is these commands are part of the application, they're part of the first area.**

Q. **Does that make sense given the claim language?**

A. **It does not. There needs to be a second partition. But the second partition is this entire web page, the global container, the entirety of the page, it's looking inside that page and finding this other div tag. But that's still**

the content of the application under the mapping done in the prior step.

Q. **And again, does this div tag, this header identified here, does that generate an area on a user's screen?**

A. **As we showed in the first claim step, div tag in itself doesn't generate an area at all, it doesn't have an associated area on the screen.**

Q. **So can the user scroll down like this and not even have that portion of the page displayed?**

A. **Yeah. So again, what you see on the screen is under user control. And you don't have these partitions on the screen anymore, you can scroll and notice that command partition which was at the top is now gone. So it's not on the screen. So it can't be a second area, it's not even on the screen.**

Q. **Now, you were here when Dr. Schmidt testified?**

A. **Yes, I was.**

Q. **And I asked him about this seemingly inconsistency, and he answered the application contains a first area and a second area and that code hasn't disappeared. Do you see that?**

A. **Yes, I did.**

Q. **What is wrong with what Dr. Schmidt is saying here?**

A. **Well, the claims require the application, first the application, a first area, he's saying the application**

contained a first area and a second area, and the claims require you have a first area for applications and a second area for commands.

Secondarily, I would say that screens don't have non-digital portion, the screen is what you see, that hasn't changed since unfortunately Videotex, that's still the same, what you see is the screen.

Q. **Now, in his answer, Dr. Schmidt seems to be equating divisions within an application to divisions or partitions on a screen. Is that a correct way to read this patent?**

A. **No, it is not. The patent is clear that there is a first area for applications and a second area for presenting command function. And there is language in the claim that also provides further support for that, this idea the back of the claim is generating a second area, these are meant to be first and second area, not one area.**

Q. **If we look actually in the specification, which I have put up on the screen, it says each page is formatted, 255, with a service interface having page partitions, 250, 260, 280, 290. Those match the numbers for the figure that you showed earlier?**

A. **Yes, it does.**

Q. **If we go back to this step, doesn't the patent say these are not to be confused as application partitions, do you see that?**

A. **Right. It says pretty clearly, each page is formatted with a service interface having page partitions and the different partitions are identified in that figure, 250, 260, 280, 290, not to be confused with application partitions. The patent is expressing an application that these are different.**

Q. **So the page or screen partitions which can be found in 3A, those would divide up the screen?**

A. **Yes.**

Q. **The application partitions, that is information that would be mapped into these screen areas?**

A. **Yeah, referring here to the content that would be put into an application page.**

Q. **Isn't Dr. Schmidt doing exactly what the patent said not to do, confusing application partitions with screen partitions?**

A. **I agree, the patent is clear that these are separate processes.**

Q. **So if we go back to the Court's claim construction and kind of put this in context, what's the first thing we have to have?**

A. **You have to have a couple things based on the claim language and the Court's constructions, you have to have a first area, and you have to have a second area. And the first area is for presenting applications, and the second**

area is for presenting a plurality of command functions, commands.

Q. **So is it right that according to the Court's claim construction, you have to have two screen areas and two things, one to put in each area?**

A. **That's how I would understand the Court's claim construction.**

Q. **This is an analogy.**

A. **Okay.**

Q. **Can you explain how this kind of might help explain what's required here?**

A. **Yes. So this probably will take us all back to elementary school. So imagine you pick up an empty tray and that tray has these partitions or these areas, and then lunch in this case can be placed, the contents can be placed in those different partitions. One doesn't understand that if I have lunch, therefore I must have a tray with partitions. These are separate ideas, separate concepts. And the patent appreciates that.**

Q. **So if Dr. Schmidt just says that we have lunch and that we have applications and commands, is that enough to show that we have a tray?**

A. **It's not. If I have lunch, I don't have necessarily partitions or in this case a tray, right, I just have content.**

Q. **Dr. Schmidt also said that these links up in the top are the command functions. Do you recall that?**

A. **Yes, I do.**

Q. **Now, are there links in other places on this page?**

A. **As we said, the whole purpose of the web is to make documents hyperlinked. So there is links everywhere.**

Q. **So basically if a user scrolls down this page they would find links from top to bottom; is that right?**

A. **The links from top to bottom to make it easier to find what you need and find what you need in many different ways. I point out again that these types of links are what is being pointed to as the entire application, the entire first area.**

Q. **So all the links on this page from the ones Dr. Schmidt circled all throughout the page are just hyperlinks within a web page; is that right?**

A. **That's correct.**

Q. **If we go back to element C, has Dr. Schmidt shown that Groupon performs this step of generating concurrently with the first partition at least a second partition for presenting a plurality of command functions?**

A. **IBM has not met its burden of proof with this claim step.**

Q. **If we go back, looking at your chart now with the two elements not crossed out. Has IBM met its burden of proving**

that Groupon infringes this claim?

A. **As we say here, I say here, IBM has not met its burden of proof that the Groupon website performs claim 1 of the '967 patent.**

Q. **And was Dr. Schmidt's analysis of the mobile website any different than his analysis of the desktop website?**

A. **It was largely the same, the same concept of the first area was the application and the second area was -- and that was represented by a global div. And the second area was just a div within that, but it's still the same single application.**

Q. **In fact, didn't Dr. Schmidt say that Groupon purportedly infringes in the same way?**

A. **That is exactly what we said he represented earlier.**

Q. **So if Dr. Schmidt was wrong about the desktop website, is he also wrong about the mobile website?**

A. **Then he would be wrong about the mobile website.**

Q. **So let's go to, there is one other claim that IBM is asserting in this patent. It's claim 2.**

Now, claim 2 is a dependent claim. Can you explain what that requires to the jury.

A. **Yes. So a dependent claim contains additional limitations, but a dependent claim relies on an independent claim, and for a dependent claim to be infringed, every aspect of the independent claim must also first be**

infringed.

And because as I just stated IBM has not met its burden of proof that Groupon's website and mobile website perform the steps of method of claim 1, it cannot be held to infringe claim 2. It depends on claim 1.

Q. **Because they didn't infringe claim 1, it automatically --**

A. **If it didn't --**

THE COURT REPORTER: Sorry. One person at a time, please.

BY THE WITNESS:

A. **They didn't infringe claim 1 so they cannot infringe claim 2.**

Q. **Let's look now at the other Prodigy patent, the '849 patent.**

And did you apply the Court's constructions for these terms?

A. **Yes, I did.**

Q. **So we've kind of put them in, substituted them in claim 1; is that right?**

A. **Yes, we did. Yes, I did.**

Q. **So let's talk about the first step: formatting applications so they may be presented to the network at a first area of one or more screens of display.**

Do you see that?

A. **Yes, I do.**

Q. **Did Dr. Schmidt essentially do the same thing he did for the '967 patent on this claim?**

A. **Yes. For this patent and this claim element, he used the same argument that he used in the '967 patent.**

Q. **So, again, he said that the first area is generated by the global container div which is part of the application web page?**

A. **Yes, he pointed to the entire web page basically starting with the global div and satisfying the first portion.**

Q. **And so is Dr. Schmidt's analysis wrong for the same reasons as you --**

A. **For the same reasons. It is not associated with an area of the screen.**

THE COURT: Doctor, if you would wait until the question is completed? It will be easier for the court reporter.

MR. HADDEN: Sorry, Your Honor.

BY MR. HADDEN:

Q. **Let's look at the next element, Dr. Weissman.**

What does step B require?

A. **Step B says: formatting advertising for potential use with a plurality of applications, through the network, at a second area of one or more screens of display**

concurrently with applications.

Q. **So what has Dr. Schmidt pointed to that Groupon does to perform this claim step?**

A. **So again he is pointing to a secondary, a portion of the very same web page, the entire application. In this case, that contain deal images. And for the same reason, this is the secondary. This is the application is the first area, so there is no second area.**

Q. **So is Dr. Schmidt pointing to some div tags within the application web page?**

A. **Yeah. He is pointing again to a div tag within the global div tag. But, again, div tags were just used to format web, web content. They have no location. They don't point to any location on the screen or area on the screen.**

Q. **So it even make sense to say that, that a second portion of one or more screens of display is the application is displayed on the first portion?**

A. **No, it does not.**

Q. **Did it make sense to say that the application displayed in a second portion of the screen are the same images that are of the application displayed in a first area of the screen?**

A. **No, it does not. The images can't, are not part of the first area and the second area. That makes no sense.**

Q. **And did Dr. Schmidt identify anything that refers to**

this div tag that causes it to generate an area of the screen?

A. No. As we said, div tags don't generate an area of the screen but there is nothing even that refers to that div tag.

Q. So is Dr. Schmidt's mapping of this claim correct?

A. In my opinion, it is not; and IBM has not met its burden of proof with this claim step.

Q. Do we have another lunch tray problem here?

A. We have another lunch tray problem. In this case, before we needed applications and command functions to fit into the different elements of our elementary school tray. Now we need applications and advertising to fit in different elements of our tray. So, again, what is being pointed to is an entire web page or an entire bunch of lunch, and that does not give us a tray. We don't have screen areas.

Q. Is there another problem with Dr. Schmidt's mapping that equates the same images with the application and advertisements?

A. Yes. So what I am going to explain here is that IBM, in the prosecution of his patent, in the back and forth communications that you do at the Patent Office, made some statements to try to get the patent awarded, to show how it was novel and different.

So IBM made a statement in that back and forth

which I'll read. It says: The display screen of a reception system is configured so that applications are presented at a first part of the screen and advertising is presented separately and concurrently at a second part of the screen.

And this comports with, in my view, the claim language, first area and second area.

Q. **Is this description of its invention that IBM made to the Patent Office to get its patent consistent with what Dr. Schmidt is saying in this case?**

A. **Dr. Schmidt is saying that, you know, that the application is potentially the first area and second area. So it is not consistent.**

Q. **Did Dr. Schmidt also say the application and the advertising are the same content?**

A. **Yes, he is pointing to the same content: deal images for both application content and also for advertising.**

Q. **What else did IBM tell the Patent Office about this patent to try to get it allowed?**

A. **IBM as you can see here, in drawing a distinction between the content, said that applications and advertising are separate entities, and they travel separately to the reception system.**

Q. **And this separate treatment of advertising and applications, was that an important part of the '849 meant?**

A. **Yes. So that was a real important part of Prodigy -- the '849 and the Prodigy system. I mentioned with videotex, things were really slow getting a screenful of information at a time. So the special treatment of advertising in which only a small object or ad can be downloaded while the user was doing other things was a way to eliminate distraction and improve performance for Prodigy system.**

So this idea that you could prefetch a little bit, prefetch advertising while the user is doing other things and not even using the network was really important to the performance goals of the patent. And that is what is stated here.

Q. **So the application would be the application that the user requested, and the advertisement would be the separate things that were prefetched? Is that --**

A. **Yes, the application is what the user was really wanting to do. We saw Dr. Filepp talk about playing games and things like that. And the ads come in in this other partition, and often the user, you want to have those, have those there, particularly when they slowed the system down. So these are separate. As it says here, the intention here was that these be separate.**

Q. **Let me go to the next thing that IBM told the Patent Office. What did they say here?**

A. **IBM is saying here, and I'll read the rejection. The**

Patent Office first rejected the claim on this claim. And then IBM replies: The rejection is based on equating applications and advertising, thus ignoring the distinction underlying the entire invention (which is based on the dichotomy of applications and advertising).

They're saying this is a special treatment. These are different things, and the patent is supposed to be about that.

Q. **And so IBM is saying that the distinction between advertising and applications was the key to the invention; right?**

A. **That is effectively what has been said.**

Q. **And that distinction is something that Dr. Schmidt is ignoring in his analysis; is that correct?**

A. **He doesn't appreciate this distinction.**

Q. **So at this point, can IBM meet its burden of proving that Groupon infringes this claim?**

A. **No, it cannot.**

Q. **Let's go to the last element which as construed requires the pre-fetching of advertising objects.**

I think you talked about this just a minute ago about the separate treatment of advertising and they're prefetched; is that right?

A. **Yes, I did.**

Q. **Now, we see on this slide, Dr. Schmidt is referring**

to caching; right?

A. **Well, to satisfy this claim step, what Dr. Schmidt is pointing to is the web page that is downloaded and that web page contains a number of images that will be stored locally or cached. And he is using that, and some of those images are not yet visible because of what the user has decided to view based on scrolling and the size of the browser window and so forth.**

So what Dr. Schmidt is doing is equating the caching of objects with pre-fetching. But that is not what pre-fetching means. Prefetching means having a system, completely separate from any user request, go across the network to fetch an object. So it's, as in the patent, when the user is doing other things that they are more interested in, the system can go out to IBM servers and say give me the next advertisement.

That is not what is happening here. The content has already been fetched. It's sitting on the user's machine. When it gets viewed is strictly based on what the user decides or when they, how they scroll. So this is just caching, not pre-fetching.

Q. **And does Groupon actually store these images on the user's computer?**

A. **Additionally, caching is a core property of the web browser. So, actually, Groupon is not practicing the**

caching step. It is the browser that is in control of caching.

Q. **And is caching images a standard thing on the web?**

A. **It's an important part of the web. Its browsers are equipped to do that.**

Q. **So has Dr. Schmidt shown that Groupon selectively stores advertising objects whose storage is established at the reception system?**

A. **No, he has not.**

Q. **So in summary, Dr. Schmidt's analysis of Groupon's website, has IBM met its burden of proving that Groupon performs each of these steps?**

A. **No, they have not. IBM has not met its burden of proof in, as we talked about before, performing any of the method steps that are highlighted in red and therefore cannot infringe claim 1 of the '849.**

Q. **So let's talk now about Dr. Schmidt's analysis of Groupon's mobile website and mobile apps. Does Dr. Schmidt establish that Groupon's mobile apps and mobile website generate the required first and second areas?**

A. **No, he does not. As we see here, again he is boxing the entire web page -- the entire, excuse me, the entire screen, entire application with a single large red box, and that is the first area. But then the second area is just within that same application in the blue box.**

Q. **So he is again saying that basically all the information that is in the application is also the advertisements in the second area?**

A. **That is correct. So the application contains these deal images, so everything is in the first area.**

Q. **And to be clear, Groupon doesn't generate these red boxes, does it?**

A. **It does not. The boxes have been drawn after the fact.**

Q. **In fact, what Groupon provides would extend far beyond this screen; right?**

A. **Presumably, there is more content in this web page that is not seen, yes.**

Q. **And on the mobile apps, I think we saw Mr. Dunham, he can keep scrolling essentially forever?**

A. **Yes, there is what is called infinite scroll. You can keep looking at more and more content.**

Q. **So that is not an area of the screen that is generated by Groupon, is it?**

A. **It is not. It is really up to the users and the browser -- I'm sorry, how the user interacted with this mobile device --**

Q. **Again --**

A. **-- in scrolling.**

Q. **-- Dr. Schmidt is equating the applications with the**

advertisements which IBM said they had told the Patent Office you couldn't do?

A. **Right. In this first area showing the large red box, he is pointing to deal images, so evidently they're part of the application, and somehow additionally they're also part of the first area and also part of the second area. So there is a distinction between application and so-called ads.**

Q. **Is this logically consistent in your view?**

A. **It is not consistent.**

Q. **Do we have the same food tray problem here we had on the website?**

A. **We do have the same food tray issue.**

Q. **So has IBM met its burden of proving that Groupon's website, mobile applications perform the steps of claim 1 of the '849 patent?**

A. **It has not met its burden, as required.**

Q. **Let's talk about the last element.**

Now, in this slide, Dr. Schmidt is pointing to this URL and this item in the header. Can you explain what these are?

A. **Yes. So what is being shown here, on the right panel and boxed in red, is a request URL. And this is for a particular resource, particular item. And that is, for example, maybe one of the deal images shown on the left.**

Q. **And this blue, what is this?**

A. **So the response to that request is shown in the kind of larger gray box on the bottom. So this is the response to that request for that URL. And it is showing a number of headers, and the one that is boxed is a cache control header.**

Q. **So Dr. Schmidt is pointing to the same ability to cache the images here as meeting this requirement of the claim?**

A. **Yes, he is.**

Q. **In fact, he says on the slide, right?, the differences between Groupon's selectively storing advertising objects for its mobile web spite and mobile apps and for its desktop website do not affect infringement of the '849 patent.**

Do you see that?

A. **Yes, I do.**

Q. **Is he essentially acknowledging that if this theory, the website fails, this theory fails, too?**

A. **Yes, he does.**

Q. **So in sum, for Groupon's mobile website and mobile applications, has IBM met its burden of proving infringement?**

A. **No, it has not.**

Q. **Now, there is another claim, claim 8, which is kind of different than the others. It has some different**

requirements. Can you just kind of give us a high level understanding what claim 8 is?

A. **Yes. So claim 8 has a couple of things. It has establishing characterization for users based on compiled data; so information about a user, a header for example; and then structuring advertising so it can be supplied to or stored at the reception system for presentation to users in accordance with those characterizations. So this is some kind of specialization of information.**

And so the Court goes on to say: wherein structuring advertising supplying to the reception system and storing a predetermined amount of the advertising data in a storage system at the respective reception systems.

So this is talking about caching information.

Q. **This is talking about the storing of the advertisements at the user's computer so they can be displayed on the different Prodigy pages?**

A. **Yes, it is referring to storing information locally so that if it's needed again, it can be brought up and shown.**

Q. **And is the idea of targeting advertisements in a videotex system something that Mr. Filepp or Prodigy invented?**

A. **No, they're not new in the patent. As I mentioned, videotex kind grew out of this online advertising. It's a**

pretty important driver to monetize these new systems. So this Alber reference, which is prior art, 1985, describes that one of the motivations for videotex would be the service provider can perform detailed analysis to the consumers so they characterize consumers buying habits and interests. This information can then be used to further target advertisements. So not only advertising but actually targeting it based on characterizations.

Q. **And has Dr. Schmidt shown that Groupon performs this step?**

A. **No, he has not, for a number of reasons. One is what is being pointed to here is caching, and caching is not -- caching is done by the system, it is not under Groupon's control.**

Q. **Are the deal images advertisements?**

A. **The deal images were pointed to as meeting the first area as to the entire application, so deal images, part of the first area, part of it is the application, so if you're not part of the second area, then you're not advertisements.**

Q. **So has Dr. Schmidt carried IBM's burden of proof that Groupon performs this step of the claim?**

A. **No, he did not.**

Q. **So, as overall with respect to claim 8, has IBM and Dr. Schmidt met their burden of proving infringement?**

A. **No, they have not.**

Q. **What's your overall conclusion with respect to infringement of the two Prodigy patents?**

A. **My conclusion is IBM has not met its burden of infringement for either the asserted claims in the '967 and the '849 patent.**

Q. **Let's talk about the next --**

THE COURT: Before we move on, I'm going to give the jury a break. No talking about the case and we'll be back here in a little bit.

(Jury exited the courtroom at 2:40 p.m.)

THE COURT: All right. We'll be in recess.

(A brief recess was taken.)

THE COURT: Bring the jury back in.

(Jury entering the courtroom at 3:08 p.m.)

THE COURT: Welcome back. We're now ready to move to next patent.

Mr. Hadden, you may continue.

MR. HADDEN: Thank you, Your Honor.

BY MR. HADDEN:

Q. **Dr. Weissman, before the break we were just starting to talk about the '601 patent. Can you at a high level just kind of introduce us to what the '601 patent is all about?**

A. **Yes. At a high level the '601 patent refers to a problem that's common in communicating with systems, open networks, for example, the web which was stateless, which**

means that the web server doesn't remember the next request, even from the same user.

And so for many applications for the web, there is a need to actually find a way to preserve state in spite of the stateless protocol to enable a conversation to continue for certain applications.

Q. **And you were here for Mr. Davis's testimony, were you?**

A. **Yes, I was.**

Q. **And was this the same kind of issue that he faced at Amazon.com?**

A. **Yes, this was exactly the problem that Amazon was facing.**

Q. **And does the '601 patent describe a way to work around that property of the worldwide web?**

A. **The '601 provides one way of doing it, yes.**

Q. **And kind of at a high level, can you explain what that way is?**

A. **Sure. So at a high level, the conversation between a web client, a user and a browser and a web server is really a sequence of requests and responses back and forth as you're getting hyperlink going back and forth. So one way to -- and remember each request shows up at the server with a brand-new connection the server doesn't remember. So one way to keep that dialogue going is to embed in each URL,**

each next sort of request to the server, add some extra information. And Paul Davis referred to that as a session, which is a unique identifier which uniquely identifies you interacting with that website.

If I interact with that website, I get my own unique identifier just by putting that little bit of extra information in an URL, we can preserve state.

Q. **In the patent, does it talk about session ID as an example of state information?**

A. **Yeah the example that the patent describes in the specification is session ID, client ID, things that uniquely identify the conversation. And this follows the construction of the Court which is state information is information about a conversation between a client and a server. This is information that tells you about the conversation, who is in this conversation, what is unique about this conversation.**

Q. **And does the '601 patent ever describe items that a user may put in their shopping cart as state information?**

A. **It never refer to resources or items or web pages themselves as state information.**

Q. **I think we saw a video clip of the inventor, Mr. Iyengar, Dr. Iyengar earlier talking about cookies as being an alternative. Is that what the patent says, too?**

A. **The patent does describe alternatives. One of the**

alternatives that is mentioned is cookies.

Q. **Were cookies prior art to this patent?**

A. **Cookies were prior art. They developed as part of Netscape early web technology and they were kind of well-known in the art.**

Q. **Just to go back and kind of illustrate what happens on the web, can you explain what this example, what's going on?**

A. **Yes. So the user has visited a particular website. This is Enjoy Wilmington, the user may request for that page across the network for the web server and that page is returned and that's what we're seeing on the screen. The server forgot, it doesn't keep track of who it's talking to, the server forgot that information. So now what the user decides to do on this particular page is click a hyperlink. This is a new request made to the server. So that's what the user is about to do. And this is request for a web, a resource web page, Parking in Wilmington.**

Q. **So the user clicked on this link, Parking in Wilmington; is that right?**

A. **The user is going to click on that link, yes.**

Q. **What the user clicks on this link, is this the request that gets sent to the web server?**

A. **That is potentially the request that goes to the web server, and the web server will service that request, but**

the web server has no way of knowing that this was the user that just visited Wilmington, it just shows up as an independent request.

Q. **Is part of this request that gets sent to the server the URL?**

A. **This is the URL. This is a request for particular resource. This is not state information, this is a request for a particular page or a particular resource.**

Q. **If we look at the end of this, it has Parking in Wilmington. Do you see that?**

A. **Yes, I do.**

Q. **Is that state information?**

A. **That's not state information, that's a URL. It's part of a resource that the URL is pointing to. This is essentially the web page that the user is requesting.**

Q. **That information, they're just telling the web server that the user wants to see the page for Parking in Wilmington?**

A. **Yeah, that is just a way of describing, naming the resource that the user is looking for, which is that particular page, Parking in Wilmington.**

Q. **And does this information, Parking in Wilmington, depend on anything else the user has done up to that point in the Wilmington website?**

A. **Right. As we described, the web protocol has no**

memory, it's memory less, the prior request which was presumably for this Enjoy Wilmington page that we're seeing in front of us is not at all concerned with this next request even though the user is clicking on that same page, the web design state was for a variety of reasons, so a brand new connection is made to the web server and it had no association between Parking in Wilmington and Enjoying Wilmington.

Q. **So if any user came -- go back. Any user came to the Wilmington website and clicked Parking in Wilmington, would this same request get sent to the web server?**

A. **Absolutely. This is just a URL. Anybody can type that same URL in the browser window and they would go to the same page.**

Q. **And when the user sends this to the server, what happens?**

A. **The server gets that request in HTTP and serves that request by returning the content of that page to the user's browser and that's what we're showing here. This is the Parking in Wilmington page.**

Q. **And what we see up here in the browser window, how does that relate to the request that led to this page?**

A. **What we're seeing in the browser window is a request for this particular web resource or web page, and you can see the URL in the top window, and that has come -- been**

delivered to the web browser and that contains the content you see shown here.

Q. **So this URL, including the Parking in Wilmington, that's basically just an identifier of this web page?**

A. **Yeah, it's a way to name the web page. It's a way to basically, you know, if we give a web page a name, it gives me that, it's a way to identify the page.**

Q. **And putting the name or some identifiers of the web page in the URL, is that just the way the web works?**

A. **That's just how to name a web page. That's just the way the web is. That's a definition of stateless protocol.**

Q. **If we want to maintain state and we want to use cookies, how would that work?**

A. **Okay. So now what we want is when we send a request, we want to be able to track information that's -- that uniquely identifies the user or the browser at this computer. And so we -- and we want the server to remember that for the next request, that was the point of what we're trying to do is have the server have a memory of who they're dialoguing with.**

And so what a cookie is is that when the request is sent over to the server, in the case of Groupon, this is how Groupon works, the server is going to generate a unique session identifier, something that uniquely identifies that I'm the one in this interaction with Groupon. If you were

to go to Groupon, you would get your own session as well. So that is generated and it's put in something called a cookie which contains that unique session ID and other information. When the request is sent back, when the response is sent back to the browser and you display the web content, the cookie travels with it, and the browser is going to store that cookie locally on the client machine.

And the purpose of that is so at this moment in time, Groupon or the server knows about all the session IDs it generated, now that the client knows. So when the client makes another request, a next request to the web server, the web browser attaches the cookie back to that request and so the server can match up the session ID and say ah-ha, I was talking to you just a moment ago, and that's the way the conversation, information about the conversation can be passed back and forth in this little bit of information called cookie.

Q. What can the web server do knowing who it's talking to that it couldn't do without cookies or some alternative?

A. So now what the web server is going to do is build an association between session ID and individual customers. So, for example, associating them with shopping carts, for example. So then a request comes in from session ID 10-8, the server can immediately know this is John I have been talking to and here is the shopping cart. Here is Bill, the

person I have been talking to and here is his shopping cart.

All I do is pass this unique identifier with this request and the server associates that with the individual party they're speaking with. This is a very simple way to track information about the conversation.

Q. **So is the session ID essentially in this instance a way to identify what browser the server is talking to?**

A. **Essentially identifies the browser, the user at that particular browser.**

Q. **Now, if we go to the claim and start walking through this, what does the first step require?**

A. **The first step of claim 51 requires receiving a service request including state information versus the stateless protocol.**

Q. **And we had the Court's construction of state information here. Do you see that?**

A. **Yes, I do.**

Q. **Did you apply that construction in your analysis?**

A. **Yes, I did.**

Q. **Is that construction consistent with your understanding in the field of what state information is?**

A. **That is my understanding of the meaning of that term and in particular in the claim stated in the patent, the way the patent works.**

Q. **And if we look at element A, it says receiving a**

service request including state information; right?

A. **Yes.**

Q. **So is this just any web request, or does it have to be a special web request?**

A. **Well, this is talking about receiving a service request, which we're in the context of the web, so that's a request for a web document or a web resource, but it also must include state information as an additional requirement.**

Q. **If we look at how Dr. Schmidt mapped this claim, and this is -- there is a lot going on in this slide so we may have to break it up a little bit. But if we focus on state information which is the requirement he has highlighted in yellow and underlined, and I'm not sure the jury will have any chance of seeing this, but we'll blow it up. What is he pointing to in this request as being the state information?**

A. **The user has clicked this piece of jewelry, and so they're expressing an interest in this. So in the box which you start to see underlined in red and yellow highlighted is the URL that is associated with that resource with that page that's been requested. And so what is being highlighted there is a portion of that URL, so this is akin to the Wilmington home page or the Wilmington parking page, it's just part of the URL.**

Q. **If we just kind of show this in a larger screen, is this where Dr. Schmidt starts with the sending of the**

request?

A. **Yeah, the user is starting with this screen which I guess is -- I can't really tell you what screen it is. It's goods. And the user is going to click on this pendant, I think.**

Q. **If the user comes to the goods page at Groupon and clicks on this particular pendant, is this the request that will be sent to the web server?**

A. **So by clicking on that pendant, the user is essentially saying give me that web resource, give me that page, I want to see that. By clicking on the URL corresponding to that web page of that resource, it is sent an HTTP request, a web protocol to the Groupon server.**

Q. **The part of this URL that Dr. Schmidt said was state information, was this part of the GG, collection custom My Three Treasures; right?**

A. **It's identifying a particular deal of the many deals that are there.**

Q. **Isn't this what Dr. Schmidt pointed to the slide as being --**

A. **Dr. Schmidt is pointing to that one part of the URL which is effectively the web page.**

Q. **And if any user came to the Groupon Goods page and clicked on that picture of the necklace to get more information on it, would this same request be sent?**

A. **Yeah. If any user clicked -- visited this page and then clicked on this pendant, the identical web request would be generated.**

Q. **So nothing in this request that Dr. Schmidt pointed to would depend on who that user was?**

A. **This is not information about a conversation. This is a request for this particular web resource.**

Q. **Does anything in this portion of the URL that Dr. Schmidt pointed to depend on what the user had done previously on Groupon's website?**

A. **No, it does not. Anybody can pick up this URL, type it in their address bar, and they will get the exact same page back. So it clearly doesn't depend on anything any user did before.**

Q. **So is this information about a conversation between the user, the server, and the client?**

A. **No, it is not information about a conversation.**

Q. **And I think you made this point already. But is this just the same as the Wilmington Parking Garage?**

A. **It is the same as the Wilmington Parking Garage.**

Q. **This is just identify what web page the user wants to see next?**

A. **Exactly. Any user can do this, and it doesn't depend on anything the user did before.**

Q. **So at this point in the interaction between the**

user's client and Groupon, are we still in a stateless protocol?

A. **We are still running a stateless protocol.**

Q. **So when the page comes back, we get to this page. That's the next page that Dr. Schmidt points to in his analysis?**

A. **Yes, that's correct.**

Q. **Okay. And this, if we look, and I don't know if it is possible to see, but again in the browser window, what we see is the same URL that we saw on the link; right?**

A. **Yes, it will show up in the address window as that URL you requested.**

Q. **So that is just like in the Wilmington Parking Garage example?**

A. **Same thing.**

Q. **So to start with, has Dr. Schmidt proven that this information in that request is state information?**

A. **No, he has not. This is not information about a conversation between a client and a server.**

Q. **So has Dr. Schmidt shown that IBM can meet its burden with respect to this element of the claim?**

A. **No, he has not.**

Q. **Let's go back to our claim. If we look at the next element: identifying all continuations in an output from said service.**

You see the Court has construed this term, "continuations." Can you explain what that means in the Court's construction?

A. **Yes, so "continuations" is given a very specific meaning. It is: a new request which a client may send to a server, such as, for example, a hyperlink.**

So this is clicking a link and making the next request on a page.

Q. **If you look at these two elements or steps, rather, together, we have "receiving a service request" and we have "an output from said service."**

Can you explain to the jury how those have to be related?

A. **Yes. So this is "at" language. So in method step B, it refers to said service. What that means is earlier in the claim, you must look for a service to which this is associated. So we find that in step A. That is, the service request that is receiving the state information. That corresponds to the "said service" in step B. So the same service that is requested by the server, particularly Wilmington parking information, what have you, that is the request. And "output from said service," that is the service we're talking about.**

Q. **So in step B, Groupon does things like identifying continuations in an output. The output has to be the output**

from the service that requested step A; is that right?

A. **That is correct. That is required.**

Q. **Let's look at how -- let's see. So if the request that Dr. Schmidt starts with is a request for the detail page on the necklace, what is the output from that requested service?**

A. **It is what the user sees.**

Q. **So it's this page?**

A. **It's a response.**

Q. **Now, in fact, did Dr. Schmidt agree with this in his deposition?**

A. **So he is asked whether he agreed that the service is identified or what a user can request, like to look at a local deal; isn't that right?**

And at the bottom, I won't read it all, he says: So that's the service that they're requesting.

So he is agreeing.

Q. **So when a user request's a deal like the necklace or pizza, and they get the page back, Dr. Schmidt is agreeing that is the service and the output that they're looking for; right?**

A. **Yes, he is. And I'm in full agreement with DWR Schmidt.**

Q. **You agree with that?**

A. **I do.**

Q. **But now we go to Dr. Schmidt's analysis of this claim. Is that what he identifies as the output from said service?**

A. **No, it is not. So now Dr. Schmidt is pointing to another service, the layout service as meeting the claim step of an output from said service. So now we introduced a second service which is not what the user requested which is improper mapping.**

Q. **And is the output from the layout service the web page that the user requested?**

A. **No, it is not.**

Q. **Now, if we go to this diagram, series of diagrams from Dr. Schmidt's report, what, in the context of this Groupon diagram, what would be the service that the user requests when they click on that link to the necklace?**

A. **Yeah. So it's a mouthful, so let me walk you through.**

Q. **Yes, walk us through.**

A. **Sure. So we have the user sitting there at the terminal. And they are requesting Groupon.com, so that is the home page. And so that is the request that is being made. And it gets passed through a router to identify the application and that is going to actually produce that home page.**

So that that is that Homepage ITA shown in the

middle. And the job of the Homepage ITA application is to effectively service as that request and return the output, return the response corresponding to that.

In doing that, we heard the term "service oriented architecture" earlier in the trial. The Homepage ITA does use some other services to help it with various aspects, so it calls various so-called backend services to help with that process.

One of those services is a layout service which is a fairly generic service that is used by many different applications to help format a web page that ultimately comes back.

Q. Okay. So is the request for that necklace going to these backend services?

A. It is not. The request goes to the ITA or Homepage ITA or the Dealpage ITA if a deal is being requested. And that request is not passed to the backend services. It is simply that the Homepage ITA application will ask those services to provide some bill of health, maybe some little bit of HTML or something that would help constructing an entire response going back.

Q. So is this mustache template that Dr. Schmidt identified, is that the output from the service request in the first step of the claim?

A. No, it can't be a mustache template. It is just a

template, and it is not the output that goes back at all to the client.

Q. **And I know this diagram says Homepage ITA. Is there a corresponding Dealpage ITA that would provide the output that requests the necklace?**

A. **Yes, there is any number of these sort of I Tier Applications that Mr. Dunham spoke about that. Remember, this is a request for Groupon.com, so this would be the Homepage ITA. If you are looking for the necklace, you are going to go to a Dealpage ITA, so on and so forth. So there is a number of these I Tier services, and many share the backend services because they do kind of generic things.**

Q. **So if we can just kind of look at this diagram. What are you showing here?**

A. **What I'm showing here is that the output from said service, the said service is the Homepage ITA. That is what www.groupon.com is being destined for. That is going to build the response for that resource and return that. That is the output from said service.**

Q. **And in the case of the request for a deal, would this be the Dealpage ITA?**

A. **That would be a different ITA. That would be the Dealpage ITA, if it is a request for a deal.**

Q. **And the output from that it shows here as HTML; right?**

A. **Correct. That is the response is the HTML page that comes back from the user and we render on the browser.**

Q. **And the same thing for the Dealpage ITA, the result would be the page with the details on the necklace?**

A. **Yeah. You get the page that corresponds to that particular deal. That would come back from the Dealpage ITA.**

Q. **So is Dr. Schmidt's analysis of this element and mapping to the output of the requested service correct?**

A. **It is not.**

Q. **In addition, once we find the output of the service, this claim requires identifying all continuations; is that right?**

A. **That is correct. And, remember, continuations, we refer to new requests that the client can issue to the server.**

Q. **Now, Dr. Schmidt said that the output from the services is this little box here. Do you recall that?**

A. **Yes, I do.**

Q. **And that is not correct, is it?**

A. **That is not correct. As we just spoke about, the output from the service that is requested is the entirety of the web page, not a small little box piece of outlook page.**

Q. **As we heard from Mr. Dunham, this little box doesn't come from the layout service?**

A. **That is what Mr. Dunham testified to, yes.**

Q. **But even if that little box did come from the layout service, contrary to what Mr. Dunham said, does Groupon identify all continuations in that little box?**

A. **So he does it in two ways. One is as I just described, if one were to look at the output that comes back, there are, you know, a number of hyperlinks which are not at all identified. He is just focusing on the box in red.**

Additionally, identifying the identifying step, Dr. Schmidt is pointing to the processing of the mustache template. As we highlighted in yellow, that is looking for placeholders and replacing them with values. But the claims require identifying continuations, that is identifying hyperlinks. Mustache template processing is just doing a string replacement, and it is not, it is not identify HREF. Even though HREF is highlighted there, it is just looking for stuff inside of those funny curly braces.

Q. **Let's take out the D step.**

If the service requested was the necklace page, is this the output from that service?

A. **That is the output portion of it.**

Q. **Yes. And did Dr. Schmidt show anywhere where Groupon identifies all the continuations in this?**

A. **No, he did not. He just focused on the buy -- the**

hyperlink associated with the buy button.

Q. **And did Dr. Schmidt provide any evidence that Groupon embeds any state information in all these other continuations on the output?**

A. **He did not provide any evidence of that here.**

Q. **So if we go to the second point you are making I think about the templates. When this said URL, is this actually a continuation?**

A. **So the word "URL" there is just, it's embedded in the string. It can be whatever you want it to be. What makes that a continuation potentially is the HREF, hypertext reference.**

The mustache template is not looking for HREFs, it is looking for things inside the curly braces. So any number of templates in this mustache templates in this example. So the word "URL" doesn't mean anything special. It's just a variable that gets replaced.

Q. **If we go back to our claim. We have another part of this element B. Can you explain what this describing?**

A. **Yes. So this requires identifying all continuations in an output that is identifying all the hyperlinks, hypertext links in an output of said service and then recursively embedding the state information in all identified continuations, in response to said request.**

Q. **And the Court has construed the recursively embedding**

step; right?

A. Yes, they have. And to explain what that means is so you have identified the continuation, for example, URL. And this requires that you modify the URL, you change it to include that state information.

Q. If we can go back to what Dr Schmidt points to for this step, which is this is from his slide. What is he showing here?

A. What Dr. Schmidt is showing in this example is that the replacement that is being done for that particular hyperlink is the URL shown in the box below. And, in fact, the URL is not being modified at all. We have the URL in the box below. It's just being asserted into that HREF. So there is no modification of the URL. We're not changing the name or any of the pieces of the URL. We're just substituting a variable for a full URL path.

Q. And Dr. Schmidt underlines some pieces of this URL in red. Do those pieces get added or embedded as part of this processing?

A. They do not. They're not embedded, and there is no modification of the URL. We just take that entirety of what you see in the second yellow box and just pushed into and replaces that variable called an URL. So they're not modifying anything.

Q. Thank you. And did Dr. Schmidt identify code that

would modify this URL?

A. He had simply identified the code that built an URL and referred to the mustache template replacement, but he didn't show any code that actually modified the URL.

Q. So has Dr. Schmidt carried IBM's burden of proof with respect to this step of the claim?

A. He has not.

Q. Now, if we go back to step B, just to summarize.

Has IBM met its burden of proving that Groupon performs this step of the claim?

A. No, it has not.

Q. And just to kind of go through, it seems like there are a lot of things wrong here. Did Dr. Schmidt and IBM identify the correct output from said service?

A. No. As I described earlier, I described earlier the output he's pointing to is not from the service that's been requested that was providing state information step A, it's some other service that's being used on the backend to help with the processing.

Q. Did Dr. Schmidt identify or show that Groupon identified all continuations in the correct output from said service?

A. No. All that Dr. Schmidt focused on was one small piece of an output, there were many other continuations, many other items throughout the page that were not

identified.

Q. Did Dr. Schmidt show that Groupon modified all of the continuations in the correct output?

A. No, there was no continuations modified. It was simply built a URL that was substituted into a variable. See the URL itself was never modified.

Q. Did Dr. Schmidt identify modifying any continuations?

A. No, he did not.

Q. Let's go to the last element here. Can you explain what this wherein clause requires and how it fits with the Court's constructions?

A. Yes. So step C says communicating a response including the continuations and embedded state, wherein the continuations enable another service request and one of the continuations must be invoked to continue the conversation. This means that what is being mapped to the continuations, that is the only way one can continue this conversation.

Q. And has Dr. Schmidt shown that this requirement is met?

A. No, he has not. So you recall, he is simply pointing to go he buy button as satisfying this step. There are many ways to continue the conversation. There are many other hyperlinks that we referred to earlier throughout this page. There are many ways to continue the conversation. Now, they may not have embedded state, but they continue the

conversation with the server.

Q. **So in sum, with respect to Groupon's website and mobile website, has Dr. Schmidt carried IBM's burden to show that Groupon perform all these steps?**

A. **No, he has not.**

Q. **Has he shown that Groupon performs any of these steps?**

A. **No, he has not.**

Q. **Let's go to -- let's talk now about Dr. Schmidt's analysis of Groupon's mobile application.**

What does Dr. Schmidt say is the request that includes state information in its mapping to the mobile application?

A. **So, he's pointing at a fairly hard to read URL, and he's underlining various aspects of that URL, including a deal ID as satisfying the requirement of state information.**

Q. **And are these things that Dr. Schmidt is underlying state information under the Court's construction?**

A. **No, the Court's construction is state information about a conversation, these are just parts of the URL, these are just requests for a specific deal or deal option.**

Q. **Is this basically the same issue that Dr. Schmidt got wrong in his analysis of the website and using clicks on the necklace?**

A. **It's the same argument.**

Q. **So has Dr. Schmidt carried his burden of showing that Groupon performs the receiving step with respect to its mobile applications?**

A. **No, he has not.**

Q. **So let's look at the next step, the identifying step. This one looks different than the website?**

A. **Yes, it does.**

Q. **Can you explain what's going on in Dr. Schmidt's diagram and what he says is the identifying?**

A. **So, what's different from the mobile applications is they return JSON which is a data format which contains some information which is going to be processed by the client. What Dr. Schmidt is pointing to is various options that may be selectable by the user as satisfying this element.**

Q. **If we go to the next step or the next portion of that step of the claim, this is the recursively embedding; right?**

A. **Yes.**

Q. **So has Dr. Schmidt shown that Groupon modifies those identified continuations in his analysis of the mobile app?**

A. **No, he does not.**

Q. **Can you explain what he's pointing to and why it doesn't show that?**

A. **There are a couple of problems. One is if you look in the JSON code, it's a little hard to see. For example, one of the pieces of so-called state information, the GA,**

the part, the Farm Kitchen is already contained in the buy URL that is contained in each of those JSON responses, that is a modified URL that has no embedding there.

The other thing that is being shown is a deal option ID. But this was not -- so we have to embed into these URLs state that was provided with the original request. So there is no deal option ID provided with the original request. This is simply added modified locally at the mobile devices, it's not part of the original request, it's not state information.

Q. **Let me put this in a little more context. Dr. Schmidt is saying here that this embedding happens on the user's device; is that right?**

A. **That's correct.**

Q. **Is that what he said in the website mapping?**

A. **Yes.**

Q. **Let me ask a better question. Where did Dr. Schmidt say the embedding took place when he was analyzing the website?**

A. **On the website, the embedding step was Dr. Schmidt said that it occurs on the Groupon server. And now Dr. Schmidt for the mobile apps, it's occurring on the mobile apps itself.**

Q. **And when the client receives continuations shown here before the modifying step, do they already include these**

pledge IDs?

A. **Yes, they do.**

Q. **So is it correct when Dr. Schmidt says that these are modified to embed this information?**

A. **In URL it's hard to see in JSON box, already contain deal -- the pledge IDs, so you can't point to that as embedding state as the next step, it's already in the URLs.**

Q. **We're just showing that here. So I guess this goes to your first point, that what he's pointing to is not the information that was in the request to service; is that right?**

A. **Yes. If you remember back in step A, the initial request that the user sends for a deal, for example, includes state information, and that's the state information that gets me passed essentially the step B to do the embedding. He's pointing to state, alleged states that never passed with the request.**

Q. **And I guess the next issue is that these were not actually modified; is that right?**

A. **That's correct. The embedding step requires modification of the URLs.**

Q. **And finally, Dr. Schmidt pointed to this as opposed to these as an example of a modified continuations. Why is that not right?**

A. **Well, this is -- in order for it to modify URLs,**

modify the continuations, you would have to put state in all of those continuations. And there is not -- you can take a pledge ID, that's not putting all possible continuations.

Q. **Now, did Dr. Schmidt agree in his deposition that the state information is already in the modified continuations?**

A. **Yeah, he's asked the question, where does the code modify all identifications to include state information and what is the state information that gets included. And he says, so the state information is the state information which is information that's encoded in the original unmodified continuation.**

Q. **Isn't that acknowledging that the precursor embedding step are not being performed?**

A. **The embedding step requires modification of the URL. What he is saying is it's already in the modified continuation.**

Q. **With respect to the mobile apps, has IBM carried its burden to prove that Groupon performs the modified all continuations step?**

A. **No, it has not.**

Q. **Let's look at that time last step. We're highlighting some different language here. Can you explain what the requirement of step C is here?**

A. **Yeah. So step C requires as a final step, communicating a response, this is a response that turns up**

after the request. This includes continuations and embedding state information. And we see in this clause before, wherein the continuations enable another service request and one of the continuations must be invoked to continue the conversation, this is the communicating a response.

Q. **Just to be clear, at this point in the claim, according to Dr. Schmidt's analysis, everything is already on the user's device; is that right?**

A. **Right. The only network communication referred to here is communicating a response that's responsive to the request, and that travels on the networks and that's not even received by the mobile device, and then his mapping is where you do some additional processing, then you can't communicate a response again to the mobile device, it's already on the mobile device.**

Q. **And so essentially Dr. Schmidt is somehow saying that communicating from one part of the application to something displayed on the screen is meeting this step?**

A. **Essentially communicating from one part of the mobile device to maybe a display manager is somehow meeting communicating a response, the response pairs up with the request, and that's a network communication, so this can't meet that limitation.**

Q. **And if we look at -- this is from claim 54 which**

depends from claim 51. And does this language make clear that the communicating has to be to the client?

A. **Yes. So claim 54 helps us understand that it says in response to said step of communicating the output to the client, remember said step means it's already been stated. In this claim 51 inherits from 51, so this is the -- saying this output saying this is what's communicated to the client, there is one communication.**

Q. **Has Dr. Schmidt shown that the output after all the processing that's continuations, is communicated to the client?**

A. **No, he has not.**

Q. **And that's because it's already on the client?**

A. **It's already on the client.**

Q. **So if we can now on the final element of claim 51, has IBM met its burden by showing Groupon's mobile apps perform each step of this claim?**

A. **No, they have not.**

Q. **Has Dr. Schmidt shown that Groupon's mobile apps perform any of the steps of this claim?**

A. **No, they have not.**

Q. **Now, claim 54 as we just talked about depends from claim 51; is that right?**

A. **That's correct.**

Q. **So what would IBM have to show to carry its burden to**

prove that Groupon infringes claim 54?

A. **Well, in order to claim infringement, 54 is a depending claim which depends on independent claim 51, so IBM would have to show that you infringed claim 54, they also infringe claim 51, which was always described met their burden to 51, so they cannot meet their burden to claim 54.**

Q. **In addition, if we look at how does that claims relate, can you kind of explain how this said embedding step relates back to the original state information, claim 51?**

A. **Yes. As we described earlier, we receive a service request initially, and that includes state information, that's the state information that we're talking about that's going to get embedded. We see that in step B of I guess 50, 51. If we turn to claim 54, what it describes is that the embedding step is going to be done in the client based on use of dynamically downloaded code, but that's done in response to the said step of communicating up to the client.**

Q. **If we look at what Dr. Schmidt says for this additional element, are these pledge IDs he's pointing to here, said state information that needs to be embedded?**

A. **No. Because the pledge IDs would have had to have accompanied the original request for the deal, and they did not. So they cannot be the claim of state in claim 54.**

Q. **So with respect to Groupon's website and mobile website, has Dr. Schmidt carried his burden of proving that**

Groupon performs each of these steps?

A. **No, he has not.**

Q. **Did he point out that Groupon performs any of the steps?**

A. **No, he has not.**

Q. **Finally, let's go to claim 54 and the mobile apps. Again, this is just the analysis you provided and performed.**

A. **This is the same problem. The state, the way the claims are structured, has to be the same state.**

Q. **And for claim 54, Dr. Schmidt put up this slide as showing the dynamically downloading and performing this embedding step. Do you recall that?**

A. **Yes, I do.**

Q. **Can you explain what he is pointing to there?**

A. **What he is pointing to is the JSON code as satisfying the step of dynamically downloading computer code.**

Q. **And that's the same JSON that is in the continuations that he pointed to?**

A. **Yes, it is.**

Q. **And do those continuations in JSON code that he has pointed to include this what he said was state information in the original request?**

A. **This has the same problem. What he is pointing to for what is embedded is not the state that was included with the first service request from the user.**

Q. **So going back to our claim now focusing on Groupon's mobile applications. Has Dr. Schmidt and IBM met their burden to prove that Groupon performs each step of this claim?**

A. **No, he has not.**

Q. **Has he shown that Groupon performs any step of the claim?**

A. **No, he has not.**

Q. **Let's switch gears and go to the last patent, which is the '346 patent.**

And can you explain what language you are going focus on in this claim, Dr. Weissman?

A. **Yes, the '346 patent. I'm going focus on step A which is the triggering step triggering a single-sign-on operation on behalf of the user in order to obtain access to a protected resource that is hosted by the second system.**

Q. **Okay. So the Court has construed "single-sign-on operation." Have you applied this construction in your analysis?**

A. **Yes, I have.**

Q. **So let's look at what Dr. Schmidt has pointed to for this step. First, what is this screen and what does it provide the user?**

A. **This is a login screen which gives the user a variety of ways of authenticating to the system.**

Q. **And by providing this web page, has Groupon triggered a single-sign-on operation on behalf of the user?**

A. **It has not. For one, you, as shown up at the top, the user already has a Groupon account, and so the user can just directly log into Groupon. It does not trigger single-sign-on.**

Q. **Okay. And could a user -- does this trigger either a Facebook single-sign-on operation or a Google single-sign-on operation?**

A. **So if you click on --**

Q. **According to the page itself.**

A. **No, the page itself doesn't trigger anything. The user has to take an action in order for anything to happen.**

Q. **And to infringe this claim, Groupon has to be the one that is triggering; right?**

A. **This is a method claim Groupon has been accused of infringement. Groupon has to perform this step.**

Q. **So if the user is triggering, Groupon can't infringe the claim; right?**

A. **The user, Google, Facebook, a combination, then Groupon is not liable.**

Q. **Now, if we look at, this just shows the user can choose any of the methods from this page; is that right?**

A. **Correct.**

Q. **So if we look at the additional information**

Dr. Schmidt provided, he provided this what he says is computer language. What is this code that Dr. Schmidt has shown here?

A. **What Dr. Schmidt is showing I guess in case of the Google, the Google button is that the code indicates that if a user clicks that button, then Google code is going to be booked.**

Q. **So what exactly does this code do as part of -- well, strike that. Does this code trigger anything?**

A. **No. All this code is doing is making an association. That code is basically saying if the user clicks that button, then the browser should call a particular set of code which has been described by Mr. Breen as Google code, Google API code.**

Q. **So it may have been to clarify some of what was discussed with Mr. Breen. So does the user's browser have code from Facebook and Google that is running in the browser?**

A. **Yes. So as Dr. Breen, Mr. Breen described, the browser, we all fetch code from Facebook and Google that would be invoked by the browser when a user clicks.**

Q. **So even though this is a Groupon web page, where it says Groupon at the top, there is actually code on the user's computer that has come from Facebook and Google; is that right?**

A. **Correct.**

Q. **Okay. And is it that code from Facebook and Google that gets invoked when the user clicks on one of these buttons?**

A. **When the user clicks one of those buttons, the browser is invoking that code to collectively trigger the single-sign-on.**

Q. **And when the browser takes that indicational click and it triggers either the Google or the Facebook code, is it the Google or Facebook code that then talks to Google or Facebook?**

A. **Yes, it is.**

Q. **So is it fair to say that all of this code that Dr. Schmidt pointed to does is connect a click essentially to that button?**

A. **It connects the click so that when that button is clicked, Facebook or Google code is going to be called.**

Q. **Is it a conduit between the Facebook code and the user's click?**

A. **Yes, it just makes an association. It is not a verb. It is not taking an action. It is just saying if it's like Athens, then this is the code that gets called. So the user has to click and the browser will invoke the appropriate Facebook or Google code in the browser, in the page.**

Q. **So is Dr. Schmidt correct that that bit of code that**

connects the user's click to Facebook or Google triggers anything?

A. **No, he is not.**

Q. **And I'm sorry. We did that with Google. Is the Facebook situation the same as the code that Dr. Schmidt is pointing to triggering a single-sign-on operation at Facebook?**

A. **Yes, the code is the same. It's the same idea. He is pointing to a button which potentially is just an association between a user clicking and calling code that the browser is going to call that is provided by Facebook.**

Q. **So if we go back to claim 1, has IBM met its burden of proving that Groupon triggers a single-sign-on operation?**

A. **No, Groupon does not trigger single-sign-on operation.**

Q. **So given that Groupon does not perform that step, has IBM met its burden of proving that Groupon performs claim 1?**

A. **IBM has not met its burden that Groupon performs this method step.**

Q. **So let's look at claim 5, which is another one of these dependent claims; is that right?**

A. **That is correct.**

Q. **So in addition to the fact that Groupon doesn't perform claim 1, are there other things that Groupon doesn't do with respect to claim 5?**

A. **Yeah. So that first element or first step is not performed or IBM has not met its burden to show that Groupon performs that additionally.**

And what it is, it says: In response to a determination at the second system that the second system does not have sufficient user attribute information to complete creation of a user account for the user at the second system.

So there had to be a determination establishing certain conditions.

Q. **Can you kind of step back and put this claim into a little context what is going on and what this determination needs in the claim?**

A. **Yes. So we're in a situation where the user wants to access a resource at a particular system, a second system. And in order to do that, even in the case of single-sign-on, the user still has to have an account at the second system. And so in this claim, and claim 1 as well, that we're going to create an account for the user where an account does not already exist.**

So in order to do that, we have to have information about the user. And what this claim is saying is if we determine that at that second system where we need to click the account we don't have enough information, sufficient information to determine that, then we have to

obtain that information, create the user's account.

Q. Now, if we look at how this works or the single-sign-on works at Groupon, we heard from Mr. Breen this morning that there are several different scenarios or flows; is that right?

A. That's correct.

Q. So to analyze this particular claim, we're going to have to go through each of these flows; is that right?

A. Yes, we are.

Q. Sorry about that. So let's start with Facebook since that is probably the most popular one.

What happens -- and this is kind of refreshing the jury about what they heard from Mr. Breen. What happens when a user clicks on this continue -- well, let's start here.

Is this a page that is provided by Groupon or by Facebook?

A. So when the user clicks on the Facebook option, as we said, the click is triggering an execution of code that is local to the browser provided by Facebook which is going to call the Facebook servers to deliver this page. So this web page is provided by Facebook.

Q. Okay. And even though it has the G on it, that's a Facebook page, is that right?

A. It's my understanding that is a Facebook page.

Q. **What happens when the user clicks on the continue button here?**

A. **The browser communicates request to the Facebook servers again. And Facebook, in response to that, will return an access token which will allow the system to get them to show information.**

Q. **And so the access token gets to Groupon by being sent from Facebook to the user; is that right?**

A. **Yes. Facebook sends the access token to the browser, and then a token is passed up to the Groupon servers.**

Q. **And does Groupon determine whether or not the access token has sufficient user attributes to create an account?**

A. **The access token is what Mr. Breen described as the page identifier. It's a random set of bits that Facebook generates to make an association but, in itself, it gains no information. Groupon can't make heads or tails of it.**

Q. **Is that what abate means?**

A. **That is what that means, yeah. So it contains no information as far as Groupon is concerned.**

Q. **So once Groupon had the access token, what happens?**

A. **Well, it can use that access token as sort of like a ticket, and then Facebook, Facebook knows something about it. It knows this is the user that has logged into Facebook. And so what it can then return is information about the user's account on Facebook.**

Q. **So before getting the information it needs to create the account in exchange for the access token, does Groupon ever make a determination whether it has sufficient information to create an account?**

A. **No, it has no information, so it just always passes the access token to give me all the information. There is no determination.**

Q. **If we go to the Google flows. Let's start with what Mr. Breen described as the one time code flow.**

How does that work?

A. **So that works in a particular way, so Google is selected for looking in, and that request then reaches Google's server which returns this one-time code, we have seen these on our phones, we get special numbers, something like that, so we get a -- that's sent from Google to the browser.**

Q. **So before we get there, is this a page that's provided by Google?**

A. **That page is generated by Google.**

Q. **The user picks an account, that request goes to Google?**

A. **That request goes to Google.**

Q. **It sends this auth code, how does that get to Groupon?**

A. **That authorization code, one time code gets sent back**

to the browser.

Q. **Does the browser then send it to Groupon?**

A. **That browser then passes that up to Groupon.**

Q. **Does that auth code contain any user information that Groupon can access?**

A. **No, this is a random generated code good for a certain period of time, so there is no information at all.**

Q. **Does Groupon ever determine whether that auth code contains sufficient information to create a user account?**

A. **Mr. Breen testified that it doesn't contain any information.**

Q. **Once Groupon has that auth code?**

A. **It sends that to Google servers and Google servers return -- getting closer -- returns the access token back to Groupon servers.**

Q. **And again, does Groupon determine whether or not that access token has sufficient user attributes to create an account?**

A. **Like the Facebook access token it's opaque, it doesn't contain any information, so then that is subsequently passed again to Google to get information back to the user.**

Q. **And once Groupon gets the information, does it determine whether that information is sufficient?**

A. **No, either the user has an account or they don't.**

There is no additional communications.

Q. **Let's go to the last Google flow, the ID token that Mr. Breen talked about. I think he talked about two flavors of this, but I think because Dr. Schmidt only accused one, you're only going to talk about the first one. Is that right?**

A. **That's right.**

Q. **I think this is the way you used to work, can you explain what happens here, again, we're starting from the Google screen, Google Web page provided by Google; is that right?**

A. **Yes. Google login has been selected and the browser communicates with Google and Google delivers this page which let's the user pick an account, they can pick any of their accounts to do this. A request is made to the Google server and they get back an ID token, which Mr. Breen described as a signed token.**

Q. **And then that token is forwarded to Groupon servers?**

A. **Yes.**

Q. **And does Groupon look in that token to determine whether it has sufficient information to create an account?**

A. **So that token contains information in the clear, and Groupon first checks to see whether or not it has an account for that user. And if it does, it can log the user in. Otherwise, it does not.**

Q. **So if Groupon gets this token, it does have information; is that right?**

A. **That's correct.**

Q. **And Groupon uses that information to see if Groupon already has an account; is that right?**

A. **Correct. And if the user has an account, we're done. If they don't, then I have the same flow we saw.**

Q. **So Groupon never looks in that token, says, oh, it has some information, but not quite enough, can you ask for more and create an account?**

A. **It either says oh, I have an account or I have nothing. And it sends the authorization code to ultimately obtain.**

Q. **So if we go back to -- if we go back to claim 5, what's your conclusion with respect to the determination requirement of that step?**

A. **In either the Facebook or in either of the Google flows that have been accused, the method step is not attached. IBM has not met its burden that Groupon performs a method step.**

Q. **So just to summary on claim 5, has IBM met its burden of proving that Groupon performs every step of this claim?**

A. **No, they have not.**

Q. **And was Groupon -- was IBM's analysis and Dr. Schmidt's analysis of the '346 claims the same for the**

website, mobile website and the mobile applications?
A. He testified that they worked pretty much the same way.
Q. So your conclusion with respect to the claims of the '346 patent applies across all of the website and the mobile website and the mobile applications?
A. Yeah, IBM hasn't met its burden that shows that Groupon website or mobile applications or mobile website perform the method steps of claim 5, they really don't infringe claim 5.
Q. Let's now switch gears a little bit. We have done infringement for all four patents. Let's talk now about the validity of the two patents that you're opining on. And just to set the record, now we have the burden of proof; is that right?
A. Yes, we do.
Q. So if we start with the '601 patent and we heard a lot about IBM's -- about Amazon.com website in 1995 from Mr. Davis. Have you analyzed how that website relates to the '601 patent?
A. Yes, I have. I was provided access to source code, discussion with the inventor, Mr. Davis, that sort of thing.
Q. So if we start with the claims now, did the Amazon website in 1995 provide a computerized method for preserving state information as required by the first part of this

claim 51?

A. **Yes, they do.**

Q. **And how do you know that?**

A. **Well, I know that by looking at the source code and seeing how it works. And seeing that that requirement was met. And also in discussions with Paul Davis.**

Q. **So just to kind of step back and put it into context, does the Amazon website work essentially the way that the '601 patent describes as far as embedding a session ID in links or hyperlinks?**

A. **Yes, at high level it works exactly the same.**

Q. **So as Mr. Davis described when a user request a page, responsive page would include these session IDs the state information; right?**

A. **The server recognizes a new conversation, generate a session ID uniquely identifying information about that conversation and it would return that, the HTTP response in the form of embedding and sending back in the hyperlinks.**

Q. **So in this kind of mockup, we don't know if this is the actual screen, but it was the screen at some early days at Amazon.com, that is your understanding?**

A. **That's my understanding.**

Q. **So at this point, would these links that are shown on this screen have the user session ID embedded in them?**

A. **That's my understanding of how it works.**

Q. **And so if we go to the next step, receiving a service request including state information, how did that work in the 1995 Amazon site?**

A. **Well, for any hyperlink that is subsequently requested, I can tell from the code that I looked at and in conversations with Mr. Davis that that carried the session ID with it, so that is carrying state information with the request.**

Q. **So the URL that would be under this button would include the user session ID already?**

A. **The URL has the session ID, has an embedded URL.**

Q. **So does Amazon perform the receiving a service request step of claim 51?**

A. **Yes, it does.**

Q. **Again, you reviewed the Amazon source code in your analysis?**

A. **Yes, I did.**

Q. **If we look at the next step, the identifying all continuations, can you explain how Amazon performed that step?**

A. **Sure. We have heard a little bit about Mustache templates and other types of templates before. Amazon does something similar. So when a request is sent to a web server with that embedded session ID, Amazon server runs some code that processes templates associated with that**

request to ensure that that session ID is placed in each and every hyperlink that is going to be returned in the output.

Q. Is this the Amazon code that runs on the Amazon server that does that embedding?

A. This is the template processing function. I think we heard it earlier Cat Sub, not a very friendly name, but the purpose of that function is to, you know, modify the template and insert information.

Q. We have heard a lot about templates and we heard about substituting things. Can you kind of step back and explain in a little bit higher level why someone like Amazon is creating dynamic web pages would use templates and how they would get processed?

A. Yes, great question.

So as I think Paul Davis said, as different users interact with the system, buy different books, you're going to generate different looking web pages for the different requests, so you're not going to have a single file that returns a web page, you have to build those pages.

And for many of the pages they're going to have a lot of similarity, they're going to say hello, thank you for coming to Amazon, there will be a lot of common things. It's very nice to put those in a template. You don't have to keep regenerating them. You have a template that has most of what you need. There is someplace where we have to

insert dynamic information specific to the conversation. If you ask the weather today, you might have a lot of common things that come on a weather page, but you have to insert the current weather. Templates are a great way of saying here is stuff that is expected that maybe won't change and identify some variable that has to change in the final output that goes back.

Q. **So is it accurate that the templates would be essentially personalized for the user who made the request as part of this processing?**

A. **Yes, they can be personalized, and of course, because they belong to the session ID, they're personalized to the conversation.**

Q. **So this code that you're showing here is not the template, but this is the code that would operate to do that customization?**

A. **That's the code that takes the template as input and takes values for the placeholders and does that replacement.**

Q. **So this is DX-376. I think this is one of the documents from the old Amazon system that Mr. Davis testified about. Is that correct?**

A. **That's correct.**

Q. **And what is this order-form-page1.cpp?**

A. **This is a template that corresponds to order-form-page1.**

Q. **And if we look at this template, can we see where there are continuations that would get identified at Amazon?**

A. **Yes. So remember continuations and new request if from a client to a server, for example, hyperlink. And if you notice -- and hyperlinks are the HREFs. And those contain placeholders. The placeholders we see for dollar zero which is a special placeholder which is for session ID. So the template processing function is looking for essentially the HREFs and replacing the dollar sign zero as Mr. Davis said with session IDs.**

Q. **Just stepping back, Mr. Davis talked about some links on the page that didn't cause requests to be sent back to the server. One example he had was a link that would skip you down the page if you were not interested in gift wrapping. Do you recall that testimony?**

A. **Yes, he was referring to what are called anchors.**

Q. **Would an anchor link that moved you down the page like that be a continuation under the Court's construction?**

A. **No, because as I just described, continuation is a new request sent from a client to the server to continue the conversation. So links or hyperlinks, you can call them either way, that just referred to another corner of the same page, are not continuations, they're just links or hyperlinks.**

Q. **How about the continuation, the link that Mr. Davis**

talked about that would be the mail to link, it would launch a mail application on the user's computer, would that link be a continuation under the Court's construction?

A. No, it's not a continuation, because it's not a new request from the client to the server to start the conversation, it's doing a side line saying now I want to send some mail and that will pop up mail application, I'll do some mail and then I'm back where I was, so I haven't made a new request to the server, I have just decided to run this other program.

Q. So as far as the requirement that Amazon identify and embed state information into all continuations, are those mail to links and anchor links relevant?

A. They are not, they're not continuation, they're not new requests from a client to a server, they're links or hyperlinks, but they're not continuations.

Q. If we look at these continuations that are part of this order form template, can you explain what the dollar zero is that Dr. Schmidt -- or that Mr. Davis talked about?

A. Yes. So the first box is what's called a post, this is what you do in a form and that generates a request back to the server so it could qualify as a continuation as well as the HREFs. Dollar zero is the dollar and then a number, dollar curly brace number, close curly brace are the template variables and they're numbered, zero, one, two, et

cetera, zero always means session ID, very special meaning, and that is the state, the state we're referring to. This identifies -- this is information about the conversation, so wherever we see continuations, that is new requests from client to server in these Amazon templates, we see dollar zero embedded in the URL.

Q. **And so that other program we saw, Cat Sub, would do something with this dollar zero?**

A. **So the job of Cat Sub would be to take this entire template as input, Mr. Davis had stepped through it looking for dollar signs, and then associating with dollar signs the number with a parameter of that field. The first one, which is the zero, is always a session ID.**

Q. **And if we go down here, we have another continuation with a dollar sign zero; is that right?**

A. **That's correct. All the hyperlinks that refer back to the server contain dollar zero.**

Q. **If we step to this entire template, the output that's being processed by Cat Sub?**

A. **Cat Sub processes the template, replace the values, and the output of that is hopefully going to become the page that's returned.**

Q. **Can you confirm that all of the continuations in this template give the session ID embedded to that dollar sign zero variable?**

A. **Yes, in this template and in other templates I saw.**

Q. **So does the Amazon.com system in 1995 meet, perform the identifying all continuations step?**

A. **Yes, it does.**

Q. **And we heard Paul Davis explain that this template is actually from 1996. You understood that; right?**

A. **Yes, I did.**

Q. **Did you talk to Mr. Davis and confirm that the templates from 1995 were substantially the same?**

A. **That's my understanding of that, yes.**

Q. **And the source code that you looked at that steps through the template and makes the embedded session ID, is that code from 1995?**

A. **Yeah, the 1995 code and the 1996 code are virtually the same. They process the templates in the same way.**

Q. **Can you tell from the 1995 code that the templates in 1995 are processed in the same manner?**

A. **Yes, I can.**

MR. HADDEN: I think this would be a good place to stop, Your Honor.

THE COURT: That's fair enough.

Ladies and gentlemen, that completes your time together today. Tomorrow expect another full day starting around 9:00 and going 4:30. No talking about the case or reading or researching about it. We'll see you tomorrow.

Thank you.

(Jury leaves the courtroom at 4:30 p.m.)

THE COURT: You may step down. Thank you.

I just wanted to talk about a few things, counsel. Anyone who wants to can leave or sit.

I did see that the jury instructions were submitted, so we'll start looking at that. I figure we may have time to talk about the objections some time tomorrow. I'll have a better idea tomorrow morning, but just be prepared that it could be some time tomorrow.

I guess, Mr. Hadden, why don't you tell me first just what is your sense as to what is in store for tomorrow, trying to think through the rest of the week?

MR. HADDEN: Yes, I think we'll probably be done with --

THE COURT: You can --

MR. HADDEN: Oh, Dr. Weissman.

THE COURT: Dr. Weissman, you are not stuck there.

MR. HADDEN: Thanks. Relax.

(Dr. Weissman leaves witness stand.)

MR. HADDEN: I think we'll be done with Dr. Weissman in 40 more minutes tomorrow. And then we'll be calling Mr. Malackowski, our damages expert.

THE COURT: Okay.

MR. HADDEN: I think that will be it. Then we'll rest.

THE COURT: That's it for your case. Do we know yet? I assume there is at least some rebuttal case from the plaintiff.

MR. DESMARAIS: Yes, Your Honor. We disclosed at a minimum Dr. Schmidt to be recalled, and then we disclosed potentially, if needed to respond to damages, Professor Hausman, but, you know, I don't know that we'll really need to do that. And then we have designated the two inventors just in case the date of invention kind of thing comes up, but I don't think we'll need that.

But we'll be ready to go tomorrow afternoon with Dr. Schmidt, and we may do real short inventors, inventor testimony, and I guess possibly Professor Hausman, but I think we'll finish tomorrow afternoon.

THE COURT: That's what I was going to ask. Will there be potentially evidence tomorrow afternoon?

MR. DESMARAIS: Certainly, IBM's evidence will be.

THE COURT: Then there is a possible Phase IV.

MR. HADDEN: Yes. We'll see what Dr. Schmidt says. I mean we may have something short, but I think it will be relatively short.

THE COURT: Okay. That presents an interesting

situation just because Wednesday is a half day, so I don't know if you have thought yet about how much time you will likely want to want for closing arguments, assuming you have left. Any thoughts?

MR. DESMARAIS: Whatever I have left, Your Honor.

THE COURT: Okay.

Mr. Hadden, any thoughts?

MR. HADDEN: An hour to an hour and-a-half. About everything I have left, hopefully.

THE COURT: Well, we'll know better tomorrow. It would be great if we could do the jury instructions and the closings all on Wednesday. I probably can have the jury deliberate even if I'm busy with other things in the afternoon but we'll just have to see.

I don't want to interrupt the closings, so it may be that Wednesday turns out to be short day and we'll just go to Thursday, but we'll decide that tomorrow.

Finally, with respect to the latest deposition objections, there are two of them. I do need a little help on them. I don't know if folks are prepared to argue that are around. It relates to Mr. Carlisle and Ms. Pomeroy.

For IBM, is that you Mr. Oussayef for both of them?

MR. OUSSAYEF: Yes, I can argue both of them.

THE COURT: How about for Groupon?

MR. HADDEN: I'm not the person, but I can fake, if need be.

THE COURT: Well, how about we hear from Mr. Oussayef on both, and then you do your best. And if you feel prejudiced in your response, then I can defer decision until tomorrow.

But Mr. Oussayef.

MR. OUSSAYEF: I'll say that I'm in the same boat, so hopefully we'll be on the same playing field here.

Your Honor, with respect to Mr. Carlisle, the deposition testimony we designated is directly relevant to something that came up in Groupon's case-in-chief which is that they elicited testimony about his opinions about the patents.

So in response to that, we designated testimony about his awareness or lack thereof of the patents to address the fact that there was I think maybe even an objection was sustained on that, but there was a response that came up. I'm not sure how exactly that played out.

THE COURT: And I didn't get a chance to look. My recollection was there was an objection but I don't recall if I sustained it or overruled it.

MR. DESMARAIS: Yes. As I -- I don't remember exact what your ruling was, but I do remember in the

redirect testimony, the very last question they said: Why do you need to change your product or something like that? And he said because we don't infringe the patents.

I objected and said he never read the patents. I don't remember what your ruling was but he had already answered it. I asked to strike and you denied the motion to strike. So it's now in evidence that this witness said we don't infringe, and so we wanted to play this response saying he never even read the patents.

THE COURT: Right. So it seemed to me if I -- I don't remember what I said on the objection, but it sounds correct that I didn't strike it.

So I suppose this might be a request for reconsideration of that. But it seems to me if I didn't strike it, Mr. Carlisle is gone, why would we bring back Mr. Carlisle at this point even by way of designation?

MR. OUSSAYEF: Well, because it would be direct -- it would give context to the entire, you know, his testimony. So to the extent -- let's say that happened on their direct examination, and we could have cross-examined him and said you haven't read the patent. But the fact that that testimony was elicited and probably shouldn't have been on redirect given that it's testimony that, you know, the objection was sustained, it makes sense to have the full context of the facts which is that he hasn't read the

patents.

THE COURT: All right. As you may or may not recall, I guess Groupon wants to actually read back that answer from the trial transcript if I allow you to do what you want to do. Do you want to talk about that?

MR. OUSSAYEF: I mean at some point, it becomes infinitely regressive. We have a sustained objection to testimony that was answered already on the record. You know, I would submit that it doesn't make sense to put that answer back on the record if the objection was already sustained to the question. Just the context would make the most sense.

THE COURT: Okay. And then while you are there, Ms. -- I said Pomeroy. Maybe it is Pomerod, Pomeroy?

MR. OUSSAYEF: Pomeroy. Yes, Your Honor.

THE COURT: Pomeroy. Excuse me. What is the status from IBM's perspective? Is some of her testimony coming in without objection or is it all objected to?

MR. OUSSAYEF: My understanding is that there is -- you know, I'm not sure exactly what the status of Groupon's objections were given the meet and confer, but I think that we designated some testimony, they had some counters. I think there are like objections on both sides, although I'm not sure exactly what Groupon's objections are, but that's my understanding.

THE COURT: And they had a declaration they referenced. Do you understand they are trying to get that declaration in?

MR. OUSSAYEF: No, my understanding is neither party is trying to get a declaration in.

THE COURT: All right. Mr. Hadden, do you want to take a shot.

MR. HADDEN: Yes, I'll take a shot.

THE COURT: Okay.

MR. HADDEN: So the first one on Mr. Carlisle, you know, they requested him. They released him, and he is gone. This notion they now get to play his deposition seems to me to just be an end runaround your rule that you don't get a recross. So I don't see a basis for doing that.

On Ms. Pomeroy, so unfortunately, we flew her out here with her little kid thinking that we needed her for further authentication, whatever their issue was. They then told us in front of Your Honor that their only issue with the authenticity of the Amazon code was whether it was actually Amazon code from 1995. So given that being their issue, we told Ms. Pomeroy that she could go home because she has no knowledge of that. Her knowledge is how the code came from Amazon in 2007 and how it has been maintained in a vault at our office since then.

So when they told us their only issue was

whether it came from Amazon in '95, I said fine, if it is irrelevant to any issue, then I'll send her home. They agreed. She went home. So I don't understand what the point is of playing her deposition now when they already told us that the only issue was what happened in Amazon in '95 and how that code was collected about which she has no knowledge.

THE COURT: So is it Groupon's position that nothing, none of her testimony is coming in?

MR. HADDEN: Right. That is why we let her go home. Once they told us the only issue was whether the code was Amazon code in 1995, she was no longer relevant.

THE COURT: And you are not trying to get in a declaration?

MR. HADDEN: No, I'm not trying to get in anything. I don't see any issue that requires her knowledge about how she had preserved a code in a vault at our office.

THE COURT: Okay. Thank you.

MR. OUSSAYEF: Your Honor, it's not the case that we agree that we didn't need any testimony. The way the facts played out is that a week before trial, she was disclosed as a surprise witness that we took the --

THE COURT: Yes, but that is all.

MR. OUSSAYEF: -- deposition --

THE COURT: There is a lot of writing here about

surprise and prejudice.

MR. OUSSAYEF: Okay.

THE COURT: I dealt with all that. That is all history.

MR. OUSSAYEF: Okay.

THE COURT: I don't think what they did was unfair.

MR. OUSSAYEF: Okay.

THE COURT: It was my impression what you all were telling me, Ms. Pomeroy can go home. This is no longer an issue. Why was that a misunderstanding, I guess?

MR. OUSSAYEF: Well, the fact is there is a question of authenticity at issue. And my question is that Groupon brought Mrs. Pomeroy to prove up the authenticity.

It turned out in her deposition she had no facts about authenticity to offer at all and, in fact, negative facts from Groupon. And then once that turned out to be the case, we wanted to designate her deposition testimony to show that there is serious questions about whether this code actually is the code that Groupon purports it to be. That is why we designated here.

THE COURT: Well, you had her here. She was in court. We all agreed we would take her out of order, and then you said let her go. We should have understood that you were going to play a deposition?

MR. OUSSAYEF: No, no, no. We never said let her go. She flew back without our understanding that she was going to fly back. I mean ...

THE COURT: That's not consistent with my recollection, but I'll double check the transcript. But I thought we were all very clear that you were letting her go. Because she was here. I was told she was here with a young child or she left the young child at home. Let's take her out of order.

MR. OUSSAYEF: Your Honor, in any case, it was not our understanding that we would not have available her testimony, one way or another. So I guess that is what I'm putting before Your Honor.

MR. DESMARAIS: I would encourage Your Honor to check that because I have zero recollection of IBM saying she should go home. I think what happened was we had an argument about her declaration and ultimately they said they're dropping her. We didn't say send her home. It wasn't our decision. We didn't participate in that.

THE COURT: Well, I will certainly double check. I don't think we talked about the status of the deposition transcript, but I think it was certainly my impression, and I'll double check whether I had a fair basis for that impression, that no one any longer thought Ms. Pomeroy had anything relevant to say about this trial but I'll certainly

go back and check.

Did you want to say anything else about Mr. Carlisle?

MR. OUSSAYEF: No, Your Honor. I think we've pretty much summed it up.

THE COURT: All right. Mr. Hadden, anything further?

MR. HADDEN: No, just that my recollection matches yours, and I think it will be borne out.

THE COURT: Well, I will take a look at the transcript.

That is all I had for you. Anything else from the plaintiff?

MR. OUSSAYEF: No, Your Honor.

THE COURT: Defendant?

MR. HADDEN: No, Your Honor.

THE COURT: Have a good evening.

(Proceedings adjourn at 4:43 p.m.)

I hereby certify the foregoing is a true and accurate transcript from my stenographic notes in the proceeding.

/s/ Brian P. Gaffigan
Official Court Reporter
U.S. District Court